

BRITISH MUSEUM 28 SEP 27 NATURAL HISTORY.



# Proceedings and Reports

OF THE

BELFAST NATURAL HISTORY

AND

PHILOSOPHICAL SOCIETY. :



SESSION 1926-27.



PRICE.

TWO SHILLINGS.



### RECENT PUBLICATIONS

OF

#### THE SOCIETY.

### CENTENARY VOLUME 1821-1921.

A review of the activities of the Society for 100 years with historical notes and memoirs of many distinguished members; copiously illustrated (viii + 212). Compiled and edited by Arthur Deane, F.R.S.E., M.R.I.A., Hon. Secretary of the Society. 7/6. By post 8/-.

### THE MONASTERY OF ST. MOCHAOL OF NENDRUM.

An account of the recent exploration of this Hiberno-Celtic Monastery under the auspices of the Society's Archæological Section, with a history of the Monastery (A.D. 440-1224) and many notes of archæological interest relating to Down and Antrim. Copiously illustrated (xxviii + 187). By H. C. Lawlor, M.A., M.R.I.A., with an interesting foreword by Professor R. A. S. Macalister, D. Litt., D.Sc., etc. 10/6.

### GUIDE TO THE RUINS OF NENDRUM MONASTERY.

For use of Visitors to the site of the Monastery; illustrated. (12 pp.) By Major C. Blakiston-Houston, J.P. One Shilling.

### PROCEEDINGS AND REPORTS

- OF THE -

Belfast Natural History and Philosophical Society

SESSION 1926-27.

EDITED BY

ARTHUR DEANE, F.R.S.E., M.R.I.A.,
HON. SECRETARY.

Belfast :

THE NORTHERN WHIG, LTD., COMMERCIAL BUILDINGS, BRIDGE ST.



### BELFAST NATURAL HISTORY AND PHILOSOPHICAL SOCIETY. [ESTABLISHED 1821.]

### CONSTITUTION.

The membership of the Society consists of Shareholders, Annual Subscribers and Honorary Members.

Shareholders holding more than two shares are not liable for an annual subscription, but shareholders of two shares pay an annual subscription of five shillings, and holders of one pay ten shillings.

In 1914 a new class of membership was created including persons of either sex, to be elected under the byelaws of the Society, and admitted by the Council on payment of ten shillings per annum. Such members have all the privileges of the Society, and take part in any business of the Society not affecting the ownership of its property. In 1917 an Archæological Section was founded. Persons wishing to join the Section must be members of the Society and pay an additional minimum subscription of five shillings per annum. An Application Form for Membership to the Society and to the Section will be found on page vii-

A general meeting of Shareholders and Members is held annually to receive the Report of the Council and the Statement of Accounts for the preceding year ending 31st October, to elect members of Council, to replace those retiring by rotation or for other reasons, and to transact any other business incidental to an Annual Meeting.

The Council elect from among their own number a President and other officers of the Society.

Each member has the right of personal attendance at the ordinary lectures of the Society, and the privilege of introducing two friends for admission to such.

Any further information required may be obtained from the Hon. Secretary, at 7 College Square North, Belfast.

### CONTENTS.

	Pages
Elliott, E. J., The Races of Europe	. 1-3
Henry, Prof., The Cult of the Dead in Ancient	
Italy	6-29
Duffin, Miss Ruth, Dr. Wm. Drennan	30-32
Annual Meeting of Society	33-37
Obituary Notices:—	
N. H. Foster	37-39
F. J. Bigger	39-40
Annual Meeting, Archæological Section	41-46
Berry, Col. R. G., Report on Work at Drumena	46-55
Lawlor, H. C., Report on Ruins of Clough Castle	55-59
Statement of Accounts	60-61
List of Exchanges	62-65
List of Shareholders and Members	66-77
Officers and Council, 1927-28	V
List of Past Presidents	VI
Membership Application Form VII	& VIII

## BELFAST NATURAL HISTORY AND PHILOSOPHICAL SOCIETY.

### Officers and Council of Management for 1927-28.

President;
E. J. ELLIOTT, F.R.S.A.I.

### Vice-Presidents ;

S. W. ALLWORTHY, M.A., M.D., F.C.S
PROFESSOR W. B. MORTON, M.A., M.R.I.A.
PROF. GREGG WILSON, O.B.E., M.A., D.SC., PH.D., M.B.I.A.

Hon. Treasuret: W. B. BURROWES, F.R.S.A.I.

**Hon. Librarian:** T. EDENS OSBORNE, F.R.S.A.I.

Hon. Secretary; ARTHUR DEANE, F.R.S.E.

#### Council :

DR. D. A. CHART, M.R.I.A. T. EDENS OSBORNE, F.R.S.A.I. S. W. ALLWORTHY, M.A., M.D., F.G.S. GODFREY W. FERGUSON, J.P., F.R.I.B.A. ARTHUR DEANE, M.R.I.A., F.R.S.E.	Retire 1928.
W. B. BURROWES, F.R.S.A.I. E. J. ELLIOTT, F.R.S.A.I. H. C. LAWLOR, M.A., M.R.I.A. PROF. JAMES SMALL, D.SC., F.R.S.E., M.R.I.A. PROF. GREGG WILSON, D.SC., M.R.I.A.	Retire 1929.
WILLIAM RIDDELL, M.A. PROF. W. B. MORTON, M.A., M.R.I.A. F. ADENS HERON, D.L., J.P., F.R.S.A.I. R. S. LEPPER, M.A., LL.M., F.R.HIST.S. H. H. JONES.	Retire 1930.

### PAST PRESIDENTS.

- James L. Drummond, 1821-22. M.D. Rev. T. Dix Hincks. 1822-27. 1827-4-. James L. Drummond, M.D. \*Wm. Thompson. 1843-52. 1852-54. Robt. Patterson, F.R.S. 1854-56. Thos. Andrews, M.D., F.R.S., M.R.I.A. 1856-58. John Stevelly, LL.D. 1858-60. George C. Hyndman. 1860-61. \*Jas. McAdam, F.R.S. 1861-63. Robt. Patterson, F.R.S. 1863-64 Prof. Wyville Thom-1864-66 Prof. Jas. Thomson. 1866-68. Joseph John Murphy. 1868-69. Robt. Patterson, F.R.S. 1869-70. Prof. Wyville Thomson. 1870-71. Robt. Patterson, F.R.S. 1871-74. Joseph John Murphy. Prof. J. F. Hodges, 1874-77. M.D. 1877-79. Robert Young, C.E. 1879-81. Prof. John Purser.
- 1883-85. Prof. R. O. Cunningham, M.D.
- 1885-86. W. H. Patterson, M.R.I.A.
- 1886-89. Prof. E. A. Letts.
- 1889-91. J. H. Greenhill, MUS.BAC.
- 1891-94. Prof. M. F. Fitzgerald 1894-96. Sir R. Lloyd Patter-
- 1894-96. Sir R. Lloyd Patterson, F.L.S.
- 1896-98. Prof. J. D. Everett, F.R.S., D.C.L.
- 1898-00. \*Thos. Workman, J.P.
- 1900-03. John Brown, F.R.S.
- 1903-06. Prof. J. Symington, M.D., F.R.S.
- 1906-08. Sir Otto Jaffe, LL.D.
- 1908-11. Sir John Byers, M.A. M.D., M.A.O.
- 1911-15. Prof. J. A. Lindsay, M.D., F.R.C.S.
- 1915-19. Prof. W. St. Clair Symmers, M.B.
- 1919-21. Prof. Gregg Wilson, O.B.E., M.A., D.SC., PH.D., M.R.I.A.
- 1921-23. \*Henry Riddell, M.E., M.I.MECH.E.
- 1923-26. Prof. W. B. Morton, M.A., M.R.I.A.

President 1926: E. J. ELLIOTT, F.R.S.A.I.

Sir R. Llovd Patter-

son, F.L.S.

1881-83.

<sup>\*</sup>Died during their Presidency.

### Belfast Natural History and Philosophical Society.

Founded 5th June, 1821.

## Application Form for Membership.

	Name, etc
To be filled up by the Candidate	[Please write name in full.]
	Description
	Residence
	, being desirous of becoming a Member
of the Socie	ety, I, the undersigned member, recommend
as a suitabl	le candidate for election.
Dated	this day of, 19
Si	gnature of A
_	te must be known to the Member signing this form.] cations are subject to the approval of the Council.]
Received	Council

### CONSTITUTION OF SOCIETY.

The membership of the Society consists of Shareholders, Annual Subscribers and Honorary Members.

Shareholders holding more than two shares are not liable for an annual subscription, but shareholders of two shares pay an annual subscription of five shillings, and holders of one pay ten shillings

In 1914 a new class of membership was created including persons of either sex, to be elected under the byelaws of the Society, and admitted by the Council on payment of ten shillings per annum. Such members have all the privileges of the Society, and take part in any business of the Society.

### ARCHÆOLOGICAL SECTION.

Persons wishing to join the Archæological Section must be Members of the Society, and pay an additional minimum subscription of five shillings per annum. State below if you wish to join this section.

I desire to join the Archæological Section.

Signature of Candidate

[All applications for Membership to the Section are subject to the approval of the Archæological Committee.]

This form, when filled in, should be addressed to the Hon. Secretary,

B. N. H. & P. SOCIETY,
THE MUSEUM,
COLLEGE SQUARE N.



# PROCEEDINGS OF THE BELFAST NATURAL HISTORY AND PHILOSOPHICAL SOCIETY.

SESSION 1926-27.

10th November, 1926.

In Museum, College Square.

PRESIDENTIAL ADDRESS: "THE RACES OF EUROPE."

[Abstract.]

By E. J. Elliott, F.R.S.A.I.

The Lecturer said that the subject of Race was a very fascinating one for most people. At British Association meetings it was generally the lectures on anthropology, ethnology and heredity that were most largely attended, and, generally speaking, the Press gave more space to the reports of addresses on such subjects than to any others.

The people of Europe were spoken of formerly as the Indo-European, the Caucassic or the Aryan Race, but about the middle of last century this description was revised, since it was clearly seen that in Europe there were three distinct Races.

Max Muller and the philologists of the middle of last century dwelt a good deal upon the close resemblance between our words for common objects and the words used by the ancient Indians, and therefore concluded that the people of Europe were just the result of a migration from the Caucasus, but it was shown that speech was not an infallible guide to Race, since there were many instances of peoples of distinct physical types speaking the same language.

The three Races of Europe, no doubt, came originally from Asia and North Africa, and have been modified by environmental influences, but how far environment has acted upon them, and how far heredity, it is difficult to

determine.

Beginning with the oldest Race in Europe, one which probably went back to neolithic times, the President referred to the Mediterranean Race, also known as the Iberian and the Ligurian. This Race is supposed to have come across from North Africa and settled on the northern shores of the Mediterranean, and is to be found to-day in a fairly pure state in Corsica, Sardinia, Greece, Southern Spain, Southern Italy and among the Semites, including the Jewish Race. While this Race still exists in a fairly pure state in the Islands of the Mediterranean, it has undergone considerable admixture elsewhere with the two other Races of Europe, particularly with the Alpine, so that the population of Spain is now known as Kelt-Iberian, and the population of Northern Italy is also largely mixed with the Alpine Race.

The second great race was the Alpine, sometimes called the Keltic Race, which overspread Europe and the British Isles about the sixth century B.C. This Race has different physical characteristics from the Mediterranean, for example, the average stature is about 2 inches more, and the complexion, instead of being dark, as in the Mediterranean Race, is inclined to be fair, with grey or hazel eyes instead of black or brown, but the great difference is the shape of the head, which is broad or what is known as brachycephalic, while the typical head of the Mediterranean Race is narrow, or what is known as dolichocephalic, in fact the difference in the shape of the head is the great mark of distinction between the three Races of Europe.

When the Romans came to Great Britain in 55 B.C., Britain was inhabited by various Keltic tribes, and it was remarked by the Romans that the British or Keltic natives were much taller than the Roman soldiers, and much fairer in complexion. This is referred to by the Roman writer Tacitus and many others. This Keltic or Alpine Race is to be found, as its name implies, in the neighbourhood of the Alps, also in Southern Germany, in most of France, in Czecho-Slovakia, Jugo Slavia, Russia, and indeed the Slavs, generally speaking, are only a branch of the Alpine Race. It is also to be found in Great Britain, chiefly in Wales, Scotland and Ireland, and in contrast with the Nordic or Teutonic Race of these countries, it is shorter in stature, darker in hair, and with the head broader and the face more inclined to be round. Naturally there is a great deal of admixture of Race, but this Alpine type is to be seen frequently in Wales, Scotland and Ireland, but not so frequently as in some other parts of Europe, such as

Southern Germany, Austria and the Tyrol.

Then there is the other great Race of Europe, namely the Nordic or Teutonic. In this case the head is dolichocephalic, the face long instead of broad, as in the case of the Kelts, and the hair generally fair, eyes blue, features angular, chin pointed, height runs from one or two inches more than in the case of the Alpine or Keltic Race. This Race is to be found all over Northern Europe, chiefly in Scandanavia, British Isles, Northern Germany, Holland, Northern France and to some extent even in Finland. This is the tallest Race in the world, that distinction belonging to the lowland Scottish, who average five feet nine inches in height, and in some parts of Scotland 5 feet 10 inches. The British all over, average 5 feet 8 inches in height, the Irish average being 5 feet 7 inches. Probably about half of the people of Ireland belong to the Nordic Race, and the other half belong to the Keltic and Mediterranean Races. Traces of the old Mediterranean Race are to be seen in Ireland and in Wales. where in some districts one meets with dolichocephalics with dark hair, dark complexion and short stature, in fact in some ethnological works photographs of Irishmen of this type are given as illustrations of the Mediterranean Race, but in cities like Belfast, Dublin, or even Cork the prevailing type is the tall fair dolichocephalic Nordic Race, and the other two Races, namely the Keltic and the Mediterranean, are not so prominent; but in the mountainous districts, such as Donegal, and in some parts of the West of Ireland, the shorter brachycephalic round faced men of the Keltic type are more common, and the short dark people of the Mediterranean type are also to be seen occasionally.

The Lecturer then reviewed the various countries of Europe, referring to the physical distinctions, and also to the part that environmental influence may have played in developing the physical appearance and character of the various peoples.

At the close of the lecture an interesting discussion followed.

Tuesday, 30th November, 1926.

In Assembly Minor Hall.

MR. E. J. ELLIOTT, F.R.S.A.I., President, in the Chair.

MR. PERCY ALLEN.

"OUR MODERN DRAMA."

(From 1905 to Present Day).

Illustrated by Lantern Slides.

[No Abstract.]

Tuesday, 7th December, 1926.

In Museum, College Square North.
Mr. E. J. Elliott, F.R.S.A.I., President, in the Chair.

DR. E. NORMAN HAY, F.R.C.O.
"THE EVOLUTION OF DISCORD IN MUSIC."

Illustrated by Short Quotations and some complete works on Pianoforte.

[No Abstract.]

Tuesday, 18th January, 1927.

In Wellington Hall, Y.M.C.A.

Mr. E. J. Elliott, F.R.S.A.I., President, in the Chair.

MR. JOHN J. WARD, F.E.S.

"BUTTERFLY MARVELS IN MOVEMENT AND COLOUR."

Illustrated by Slides and Bioscope Films.

[No Abstract.]

Tuesday, 25th January, 1927.

In Museum, College Square North.

Lecturer:

MR. DAVID E. LOWRY, J.P.

Subject:

"SCANDINAVIAN AND IRISH IN 10th, 11th AND 12th CENTURIES."

Illustrated by Lantern Slides.

[No Abstract.]

Tuesday, 8th February, 1927.

In Museum, College Square North.

Mr. E. J. Elliott, F.R.S.A.I., President, in the Chair.

MR. RICHARD H. HUNTER, M.D., M.Ch., F.Z.S.
"MAN'S UPRIGHT POSTURE."

Illustrated by Lantern Slides.

[No Abstract.]

Tuesday, 8th March, 1927.

In Museum, College Square North.

MR. E. J. ELLIOTT, F.R.S.A.I., President, in the Chair.

COLONEL R. G. BERRY, J.P., M.R.I.A.

"CATHAIR BOIRCHE: ITS SITE, REMAINS.
USE, AND HISTORICAL AND RELIGIOUS
SIGNIFICANCE."

Illustrated by Lantern Slides.

[No Abstract.]

22nd February, 1927.

In Museum, College Square.

MR. E. J. Elliott, F.R.S.A.I., President, in the Chair.

PROFESSOR R. M. HENRY, M.A., M.R.I.A.

"THE CULT OF THE DEAD IN ANCIENT ITALY."

In the year 386 A.D., 70 years after the so called "triumph of Christianity," a prominent and wealthy citizen of Praeneste, Postumius Julianus, died after making a will, containing the following clause—"I, Postumius Julianus, of the rank of Senator, being in good bodily health and of sound mind and unimpaired judgment, having in mind the uncertainty of life, have made this will. Amongst other things I will that there be given to the citizen body of Praeneste out of my property at Praeneste the farm known as Fulgerita . . . on the condition that in memory of me they worship my spirit every year without fail; and that they also set up in the forum a statue in my name and inscribe upon it a copy of this my will: that they should not have power to pull down the statue, and that if they should ever wish to dispose of the property it should be taken over by the imperial exchequer." Postumius died on the 16th of December, and on the 4th of March following the grateful inhabitants of Praeneste set up the statue with an inscription on its base containing, besides the clause of the will which I have quoted, a resolution of the city to hold a solemn banquet in his honour at least twice a year. The inscription on the base of the statue is still preserved at Rome.1

It is clear that the resolution of the people of Praeneste to hold a solemn banquet at least twice a year was intended to fulfil that part of their benefactor's will which prescribed to them the worship of his spirit as one of the two conditions upon which the property bequeathed to them was to be enjoyed. The only other express condition is the setting up of a statue in the name of the defunct. This statue need

<sup>1</sup>CIL, XIV, 2934: Dessau Inscrr. Lat. Sel. 8375: Orelli-Henzen Inscrr. Lat. Sel. 4360.

not necessarily have been a portrait statue of Postumius Julianus, as it was not uncommon to represent the dead under the form of some deity; and the testator simply asks for a statue in his own name (nomine mei). Now what meaning did the testator attach to his request that his fellow townsmen should "worship his spirit," and how did they suppose that a solemn public banquet, in which they should all participate at least twice in the year, the cost doubtless being defrayed out of the income of the estate, would be a fulfilment of his wishes, and give them a lawful title to enjoy his benefaction?

The phrase <sup>1</sup>colant spiritum meum is somewhat unusual. The word spiritus seems to have a Christian tinge: and though its use is not confined to Christian inscriptions, it is seldom found in inscriptions which are undoubtedly pagan. <sup>2</sup> Praeneste was only a few miles from Rome; and it is quite possible that the word was gradually passing from Christian usage into the usage of the pagans generally; but the phrase to "worship my spirit" can have been used only by a pagan; and the solemn banquet was undoubtedly a pagan usage. To explain the full significance of this inscription we must go back to a very early period in the history of Italy.

Our knowledge of the burial customs of ancient Italy, and of the beliefs upon which these customs rested, is derived partly from actual monuments, such as the contents of graves, and inscriptions upon tombstones, etc., and partly from literary sources. The knowledge derived from these is, however, far from complete; and deductions from the evidence they afford must be subject to control from considerations derived from analogous customs elsewhere and from that branch of anthropology which is specially concerned with the study of primitive psychology. And we have continually to be on our guard against that common source of error, the assumption that traditional usage or traditional formulae imply by their continuance the continued life of the beliefs in which the usages or formulae in question had their origin; as well as against the more subtle error of the assumption that a definite belief lies at the root of or can fully explain every particular usage. And in the interpre-

<sup>&</sup>lt;sup>1</sup>See the discussion on this point in Jacobsen, Les Manes ii, p. 225, N.3.

<sup>2</sup>cf. Dessau op. cit. 8190.

tation of practices which we find to have been in use long before any written evidence as to their significance is available we must always bear in mind the essentially hypothetical character of all explanations. Nothing, for instance, is more common not only in ancient Italy but in other parts of the world, than the practice of depositing broken objects of various kinds in graves. Why were these objects broken (in many cases apparently with deliberation) before being placed beside the dead? Did the practice arise simply from economy, the survivors not wishing to part with a sound object and substituting for it one that was damaged, and, when this usage was once established, conforming to it by breaking sound objects in obedience to the tradition? was it because they did not wish hoards of this kind, especially if they included weapons, to fall into the hands of thieves, or strangers and possibly enemies? Or was it that they, so to speak, killed the deposited object by breaking it, that it might more fittingly in this condition accompany the dead? Or did they believe that the dead went to a land of spirits where he could use not the objects he had used here but only their spirits, and that the breaking of the object released, so to speak, its spirit for use in that strange land? All of these explanations have been given; for each there is something to be said; against each there is also something to be said; and it may be that one explanation is true for one society, another for another; or that more than one of these motives, consciously or unconsciously, may have combined to establish or strengthen the usage.

And an explanation of an ancient Italian custom is none the better for being in Latin and being put forward by a contemporary of Cicero or Ovid; at best it can tell us not the origin of the custom, but the meaning attached to it at the time the explanation is given. And it may not even be as reliable as that: it may be a mere guess, much less worthy of attention than the hypothesis propounded by a modern anthropologist; or, if not merely a guess, it may be that sort of explanation of Italian usages to which Latin writers were peculiarly prone, an explanation derived by analogy from the customs or usages of the Greeks, or even an explanation invented by Greeks for usages of their own and transferred uncritically into the domain of the usages of Italy.

Bearing in mind these possible sources of error let us now examine the available evidence bearing upon the question of the cult of the dead in ancient Italy: that is to say, upon those usages, including the use of words and formulæ, which throw some light upon the beliefs of the ancient inhabitants of Italy as to the duty of tending the dead.

Our earliest evidence<sup>1</sup> is derived from the excavations of primitive graves in the peninsula. These graves have been excavated in hundreds from Liguria to the extreme south of Italy, and they reach back as far perhaps as palæolithic times. They throw, if not a flood of light, at least a certain illumination upon many details of life in prehistoric times, and their evidence with regard to burial customs is, as to the facts, clear enough.

It would seem that in the earliest neolithic period, perhaps the graves in question date even to the end of the palæolithic period, it was sometimes the custom to bury the dead in the floor of the cave which the family had occupied as a dwelling place; and this early custom seems to have persisted sporadically into later times, being abandoned, if not for reasons of health, at least, as time went on, from considerations of space. But with the exception of this relatively small number of habitation burials, it was the custom to the end of the neolithic age to inhume the dead, either in caves, or in shallow graves cut in the earth, sometimes with, sometimes without, a protection of slabs of The position in which the stone round or over the body. body was laid varied. Sometimes stretched out upon his back the deceased lay with his arms folded by his sides: sometimes the body was in a sitting position: again it was placed upon the side with the knees drawn up. orientation varied from place to place. With the body were generally deposited objects which belonged to the ordinary life of the tribe: weapons in the case of men, pottery and articles of personal adornment in the case of women: with both men and women brooches and pins for fastening the clothes are found in such positions as to indicate that the deceased had been put fully clothed into the grave. But in many cases the bones are covered with a red pigment, as

<sup>2</sup>The evidence is collected in von Dühn, Italische Gräberkunde, I (Heidelberg, 1924): cf. T. E. Peet, The Stone and Bronze Ages in Italy (Oxford, 1909) and D. Randall MacIver, Villanovans and Early Etruscans (Oxford 1924).

though either the body had been stripped of its flesh or the soft portions had been allowed to decay before the final burial took place, the bare bones being then covered with the red ochre, of which the remains in small pots, accompanied sometimes with the instruments used in smearing the pigment upon the bones, are left lying (either by accident or design) beside the corpse. And in a number of graves the objects which have been deposited have been broken (at least sometimes with all the appearance of deliberation) and they include certain small objects of no apparent use, but identical with the amulets known to have been used in And the objects of daily use, such as historical times. weapons or pots, are in such a position as to show that before the grave was closed they were either placed in the corpse's hand, or beside it, as if to be ready in case of need. Further, there are frequently found pots containing the remains of food, whether placed there for the use of the dead, or remains of a feast which the survivors held beside the corpse, of which the charred bones and ashes which form a deposit round the corpse seem to furnish additional evidence. And the remains sometimes show traces of the action of fire, which may (though without any great certainty) be attributed to the supposed custom of cooking the funeral feast in such close proximity to the corpse as to char the bones; though it must be admitted that the fact of the scorching of the bones may be due to other causes, and form evidence of the existence of other rites of which we hear in other primitive communities. And in some cases of burial in caves, apparently artificially constructed in Southern Italy and especially in Sicily, the dead seem to have been placed in a sitting position around the walls of a burial chamber with food and drink placed before them, of which perhaps even the survivors may have partaken before the sepulchre was finally closed.

These facts attested by the excavation of hundreds of graves in all parts of the peninsula are formal proof of the existence during the stone age of a somewhat elaborate ritual with regard to the disposal of the dead, a ritual which in its main lines was the same for all the branches of the palæolithic and neolithic inhabitants of Italy; and they furnish presumptive proof that the peoples who invented, or at least adhered to, such a ritual held some beliefs with regard to the dead which explained at least some of the

usages they employed. As to the nature of these beliefs the evidence is not so clear, but some things seem to be very significant. The number of amulets found in neolithic graves is too great, and their presence too widely distributed, to be due to mere accident: and they must be taken in connection with the finds (not so numerous, it is true) of certain objects, such as statuettes of female idols, or objects resembling the Cretan "horns of consecration" which have a definitely religious import. Amulets are worn by the living to protect the wearer against evil influences of whatever kind: their presence in graves would seem to indicate that the dead were not, without some similar protection, proof against those evil influences which the living had to fear: and the statuettes and horn-like objects may have in the same fashion been intended to furnish a similar protection. At least they indicate, not improbably, that the dead stood to whatever dim religious ideas these objects may have signified in a relation which their decease had not completely broken. Further the placing of objects of daily use either in their hands or where they might conveniently be reached would seem to indicate that the dead were supposed to make use of them in some fashion, or that it seemed to the survivors not impossible that they might revive and come to require them. Whatever they may have considered the possible, probable, or certain use to be to which these objects might be put, it was clearly customary with the survivors to regard the matter as important enough to entail a uniform adherence to the custom of putting them within the reach of the deceased.

The smearing of the bones with red ochre¹ or other red colouring matter is a custom which is not confined to Italy: it is in fact found in the neolithic age all over Europe; it is a custom in use in many primitive communities as far away as Australia and New Zealand. And it was not only the skeleton but sometimes the inside of the burial chamber which was coloured red, which seems to disprove the argument that the presence in the grave of pots of red ochre may have been due to a desire to provide the dead with the means of decorating himself or herself, if it should be necessary, with a mode of ornamentation usual in his society and which he had practised during life. For the covering

<sup>1</sup>For a discussion of this point see von Dühn, Archiv f. Religions Wissenschaft, ix (1906), pp. 1 ff.

of the corpse and the inside of the burial chamber with red can hardly be supposed to be a mere effort of ornamentation: and we can hardly rest content with an explanation which does not take account of such apparently analogous customs as that found, for instance, in Australia where the survivors bleed themselves copiously and cover the grave and the corpse with their blood. And it is not necessary to go so far as Australia for parallels. We find one at a later time in Rome itself. Varro says<sup>1</sup> that women at funerals were accustomed to tear their cheeks with the object of satisfying the dead with the sight of blood: that the practice of shedding human blood was paralleled by that of shedding the blood of animal, and in some cases of human, victims. which on account of its expense and cruelty was replaced by the custom of covering the corpse with a red winding sheet. Whatever diffidence one may feel in accepting Varro's explanations or chronology, he may be taken as trustworthy evidence for the use of the red winding sheet, which is the fact within his own knowledge from which he starts; and that women used to draw blood from their cheeks at funerals is proved independently of Varro by the prohibition of the practice by the law of the XII Tables<sup>2</sup>. The use of red then in connection with death and of blood survived at Rome until the first century B.C. But what idea was connected with the use of red, not by the civilized contemporaries of Varro, but by the savages of neolithic Italy? Did they wish by imparting to the corpse the colour of that blood which is the life to ensure by a kind of magical ceremony that it should still live in some sense under the form of apparent death? Did the red smeared on the walls of the chamber serve the purpose of cheering its inhabitant with the colour of life that he might dimly feel himself still in some sense at one with the living? And did the survivors, by giving him the illusion of life in the grave, design to keep him there contentedly lest he should break out and come once more as a ghost to visit the old familiar haunts? In a word, was the rite for the benefit of the dead or for the protection of the living against his ghostly visitations? There is no sure answer to the question.

All that we can assert with certainty is that the inhabitants of Italy in the stone age believed that it was in-

<sup>1</sup>See Servius ad Aen. iii, 67.

<sup>&</sup>lt;sup>2</sup>Bruns Fontes iuris Romanil, p. 36.

cumbent on them to inter the remains of their fellows with certain ceremonies which included that of supplying them with certain necessaries of life in the tomb, that of securing their last resting place against disturbance, that of leaving with them amulets and other protective objects and probably that of partaking of a funeral feast in the immediate neighbourhood of the corpse. It is hard to believe that the people who devised and practised these ceremonies had not some dim belief that the dead still retained in the tomb some of the habits of this life, and still stood in some shadowy relationship to the living.

But with the dawn of the bronze age in Northern Italy there came an incursion, probably from the North, of a people who practised not inhumation but cremation. were the people who built the lake dwellings in the valley of the Po, and later formed the so-called terre mare, or settlements on dry land of which the shape and construction were modelled upon those of the lake dwellings. methods of disposing of the dead were by means of cremation at an open fire, collecting as many of the fragments as possible of the calcined bones and storing them in urns which were then arranged in rows, each covered either by a stone or by an inverted jar. They seem to have constructed for their dead, side by side with the settlements of the living. a kind of necropolis, conforming in its plan and arrangement to the settlement occupied by the survivors. Those cemeteries of this period which have been excavated on the dry land show that it was the practice to place the funerary urns in rows upon the surface of the ground, so close together that the excavators in many cases could not remove one urn without damaging its neighbour, earth being heaped round the urn as high as the neck: when the available space was filled a layer of earth was placed over all, and the new urns were placed upon it on top of the old. This was apparently at first the only ritual: the burning of the remains and their deposition in jars in an arrangement resembling that in which the living arranged their dwellings. No offerings were deposited with the dead, though there is some evidence for the assumption that certain objects of daily use may have been cremated with them. But in the earliest of these cemeteries there is no trace of a practice which is found later, of putting into the jar along with the ashes objects of use or value: nor is there, as there came to be later, any particular ritual form of jar used for the purpose of keeping the ashes: any jar might apparently in the earliest period serve the purpose: while in later stages the biconical form seems to have become the form sanctioned by usage if not by prescription.

As time goes on we find an increasing approximation between the accessory usages attached to inhumation and cremation respectively. The cremating peoples began more and more to deposit with the ashes objects of use or value: they ceased gradually to leave the burial urns exposed on the surface of the ground and deposited them in pits, no longer packing them close together but providing each urn with its own secret and protected resting place. This more developed practice is characteristic of the Villanovan civilization belonging to a people akin to those of the Terre Mare, like them coming in from the north, but at a later period when the bronze age was fully come. These Villanovans, whose first settlements were excavated near Bologna, made their way eastwards into the Umbrian territory and southwards into Etruria and Latium: no burials of these people have yet been found south of the Alban Hills, though they buried on the site of the Roman Forum: in Etruria they preceded the coming of the Etruscans by several hundred years.

The Villanovans developed in course of time some very characteristic burial rites which seem to indicate a closer approximation to more definite ideas as to some shadowy survival of the deceased than can be inferred from the earliest cemeteries of these cremating peoples. The urn containing the ashes not merely assumes a ritual shape, the well known biconical urn, but this begins to be deposited in a large jar around which, before the grave is sealed and covered over, are deposited other smaller jars: and the ossuary urn assumes in many cases the form of the "huturn," modelled on the shape of a primitive wooden dwelling, the details of which such as roof tree, door and bar are often reproduced in pottery with a careful fidelity: or the urn is made in the rude shape of a human figure, the head and face being roughly and sometimes carefully modelled. The attempt to render the last home of the dead in a shape recalling that of his earthly house bears a striking analogy to what may be seen in some of the rock graves of the neolithic peoples in Sicily who practised inhumation, where not merely the chamber in which the dead repose assumes the form of a living room, but the entrance is modelled to resemble the door of a house. The approximation of the house of the dead to that of the living may in both cases indicate some dim thought that the dead occupied the grave in some way which made it natural that its form should resemble that of the dwelling to which he had been accustomed during his life.

But these cremation-practising peoples from the north were not the only newcomers who swarmed into Italy during the third and second millenium before Christ. The great Umbrian-Sabellian stock who came in from the north and whose speech was akin to that of the Latins succeeded in establishing themselves all over the centre and east of the peninsula, and pushed down far to the south. But these, though undoubtedly of kin to the cremating immigrants, unlike them practised inhumation. And settling down, as they did, among the peoples of neolithic stock who had similar burial rites they confirmed the practice of inhumation over large parts of Italy.

Last of all came the Etruscans, arriving by sea probably from the east in the ninth century as a comparatively small band of wealthy, highly civilized and well armed people who established their rule over Etruria, across to the Adriatic in the north east and as far south as Campania, only gradually being driven back upon Etruria by the growing power of Rome and of the Umbrian and Oscan stocks upon their eastern and north eastern borders. practised indifferently both inhumation and cremation, depositing their dead in the days of their prime in sepulchres whose magnificence answered to the proverbial splendour and luxury of the Etruscan civilization. The walls of their burial chambers were covered with paintings representing scenes of joy and feasting, or with grim representations of the fate of the dead in that gloomy underworld to which the sombre religion of the Etruscans condemned many of their departed: and around the sarcophagus or urn were heaped treasures of bronze, of silver and of gold, helmets and household utensils and the trappings of their horses.

And all these stocks, aboriginal or immigrant, retained with a grim persistence their peculiar burial rites down to

<sup>&</sup>lt;sup>4</sup>See in addition to the works mentioned above D. Randall MacIver, *The Etruscans* (Oxford, 1927).

historical times. Even where, as in Rome, people of various stocks lived side by side in daily intercourse their dead bodies were dealt with according to the usages immemorial in the families to which they belonged. In many respects the practices of mourning or of the funeral procession were identical or were assimilated through proximity, but the final disposal of the body either to the grave or to the funeral pyre was in strict conformity to the ancestral practice. Only occasionally or for very special reasons was this rule infringed. The great family of the Cornelii, for instance, always buried their dead; but in the first century B.C. the dictator Sulla, fearing that on his death his enemies might desecrate his remains, gave orders in his will that he should be cremated, the first exception to the ancestral custom.

We have thus to deal alike in Rome and in Italy with a state of affairs in which cremation and inhumation were practised side by side as alternate means of disposing of the dead; and we have to consider whether this difference of custom in historical times denoted any difference of opinion or belief with regard to the relation of the dead to the living and whether, supposing such difference of opinion to have existed originally, there grew up any common belief held equally by the adherents of both methods.

As I have said, we must, for the periods before written records are available, be content with probabilities and conjectural answers. It may be that the people who buried their dead three milleniums before Christ considered that the dead continued to exist in some shadowy way in the tomb where he had been laid with such scrupulous care. And it may be that they who burnt the bodies of their dead considered, as did the Homeric Greeks, that the soul separated from the body departed to some far land and came no more to his old haunts. Here we can rely only upon analogies drawn from the known beliefs of savage tribes to-day who may be presumed to be at about the same stage of culture. But in ancient Italy as we approach the historical period the case is different. We find adherents of the two rites of inhumation and cremation living side by side and depositing their dead in contiguous resting places. And this proximity is not casual but permanent. Let us take, for instance, the

<sup>1</sup>Cicero de Legg, ii, 22, 56,

city of Rome, which we know incomparably better than any other place in Italy. Here as we know from the very earliest times the two rites were practised side by side. But the families who differed in this differed in hardly anything At a very early period the ceremonies of the State religion were fixed at Rome and acknowledged as part of the Roman constitution by all alike: the usages of public and private mourning were a matter of legal enactment; the way in which all alike were carried to their last resting-place was fixed by tradition; it would have been strange indeed if some accommodation between divergent views, if these had originally existed (as is possible), had not come about during the course of time. And what applies to Rome applied increasingly as time went on to the rest of Italy, which gradually had come under the political and social dominance of the conquering city. Even if we had no other guide than such probabilities we might feel ourselves fairly safe in assuming that the adherents of the two rites must have had some beliefs, at any rate, in which they could unite. But fortunately we are not left to mere conjecture. For among those festivals which belong to the very earliest stratum of the Roman State religion we find two which are directly connected with the dead. One of these was in the month of February, the other in the month of May.

The festival in February called dies parentales, the days sacred to ancestors, began on the 13th with an offering made by the Vestal Virgins at the tomb of Tarpeia, a very ancient grave on the Capitoline hill. From that till the 21st "all temples were closed, marriages were forbidden and magistrates appeared without their insignia." These seem to have been precautions against contact with the ghosts who were apparently during this month, the month of purifications (februa), particularly active. But apprehension with regard to them seems to have been over with the nine days during which the temples were closed. On the 22nd came the festival of the Caristia or cara cognatio, "dear relationship," on which the members of a family, forgetting their quarrels, united in a family festival of the Lares, or protecting deities of the household. This mixture of fear and affection is very characteristic of Roman ideas about the

<sup>1</sup>See W. Warde Fowler, Roman Festivals of the Period of the Republic, pp. 306 ff.

dead, and strikes its roots deep into that primitive state of the human mind in which fear and affection seem almost one.

The spirits of the dead to which offerings were made on these days were called at Rome the manes, the word which is so frequently to be found in the funerary inscriptions of the Imperial epoch. The Roman antiquarians gave as the origin of this word a root meaning "good"; and if this be true the word is only one of many given by way of compliment to beings whose ill will is feared and who must be placated, or at least not stirred into activity by the mention of their real name. But (in spite of the Roman antiquarians) it is not at all certain that this is the real origin of the name. There is a good deal to be said for the view that the root is identical with the Greek word menis and that it denotes not the "good" but the "wrathful" beings. Whether this be so or not, that side of the Roman belief which regarded the spirits of the dead as undesirable neighbours comes out very clearly in the other festival held in May. month the ancient calendars note a festival called the Lemuria which was held on the 9th, the 11th, and the 13th of the month. That it was a public festival is certain from its inclusion in the official religious calendar, but we have no detailed knowledge of any public rites performed on any of these days. And that the three days were days of dread is made plain by the fact that no public business could be performed on any of them. The name, too, is significant: for the word lemures is the Latin word for restless and fearsome, if not malignant, spirits. Whatever be the relation between this festival and the preceding, it is clear that it represented a side of the relation between the living and the dead which is in contrast at least to that feeling which lay at the root of the celebration of family affection at the festival in February. And Ovid, in his description<sup>2</sup> of what occurred on this occasion, though he says nothing of public ceremonies, tells us of a piece of private practice which is significant. According to him, the head of the family on these days rose at midnight. Without sandals, the straps of which, by confining his feet, would have brought him by sympathetic magic under the power of the ghosts, and

20vid Fasti v. 419 ff.

<sup>10</sup>n this side of the beliefs of the Romans see Jobbé-Duval, Les Morts Malfaisants (Paris 1924).

having purified himself by washing his hands, he walks through the house nine times. Putting black beans in his mouth, and without turning his head, he spits them out as he goes, saying, "With these I buy off myself and my household." Again he washes and, to frighten the ghosts, strikes bronze vessels, and then, nine times repeating, "Depart, spirits of my fathers," he looks round to find that the ghosts have departed. This, though a private and not a public ceremony, illustrates that feeling of dread towards the spirits of the departed which the name of the public rites would lead us to expect.

But, public or private, this ceremony, and the festival it is connected with make two things plain: first, the official recognition given by the Roman state religion to what must have been a common feeling of the community, the fear of the hostility and power of the dead; and the details of the private ceremony make a second point clear—that this fear, to be countered by practices of primitive and immemorial magic, goes back to a very remote period in Roman and Italian civilization. And if this be so, we may perhaps venture to enquire whether it may not be assumed to lie at the root of some of the burial practices of prehistoric Italy. May not the careful closing of the tomb in inhumation, the careful covering over of the ossuary urn in the rite of cremation, be intended to confine the spirit that inhabited either to its proper place? And (if I may add another conjecture) may not the breaking of at least the weapons placed beside the dead have been intended to secure that he should not use them again to the detriment of the living?

But these two festivals do not exhaust the public relations of the community with the realm of the dead. On three days in the year<sup>1</sup>—August 24, October 5, November 8—the so-called mundus, an opening in the Palatine near the temple of Apollo, was officially opened, being closed on all other days in the year. On these three days no official business might be done, for the opening of this pit was supposed to give access to the underworld of spirits, and into it offerings were cast to secure their favour. And similar offerings were made at the Lacus Curtius in the Forum, no doubt the site of an old grave to which the heroic

<sup>1</sup>G. Wissowa, Religion und Kultus der Römer, pp. 188 f. See Warde Fowler's reservations op. cit., p. 211,

legend of Curtius was later attached. Doubtless there were many graves throughout Italy at which similar offerings to the dead were made1.

It is clear that Roman official religion recognised the spirits of the dead as beings whose existence the state was bound to recognize, either as beings who were to be dreaded and placated (lemures) or as beings with whom it was possible to enter into some sort of friendly, if not affectionate, relations. But these friendly relations were established in the circle of the family. The general body of the citizens were, so to speak, on their guard against ghosts as a class. A Roman general<sup>2</sup> on devoting the enemy's army to destruction might indeed invoke the Di Manes, the ghosts of the underworld, and call upon them and their monarch Dis and Mother Earth to bring the foe to destruction: but he asked it not as he might ask a favour of Jupiter or of Mars, vowing to him a temple or games as a recognition of his power and goodness, but as from beings who would be satisfied with no sacrifice less than that of the life of the worshipper; and the general who thus devoted the enemy to doom had to devote his own life with them to secure the answer to his prayer.

And, so far as Roman official religion is concerned, the relation of the community to the spirits of the dead was one in which the dead were a vast realm of anonymous spirits among which none was singled out for special mention or regard. They are always spoken of in the plural. There is no clear evidence in Italy of any particular spirit becoming the object of an official cult observed by the whole community. It is true that Aeneas as said to be worshipped after his death as Jupiter Indiges, and his tomb was shown beside the river Numicus as late as Imperial times<sup>3</sup>: that Romulus was said to have been worshipped after his death as Quirinus: that the Vestals opened the Parentalia by an offering at the tomb of Tarpeia. But the mythical figures of Aeneas and Romulus are the creation of an age under the dominance of Greek ideas, and were assimilated to the Greek heroes, beings who after their death were worshipped for their services or their powers. And the offerings of the

3Livy i, 3.

<sup>1</sup>See Piganiol. Recherches sur les jeux romains, p. 9 ff. 2W. Warde Fowler, The Religious Experience of the Roman People, pp. 206 ff.

Vestals to Tarpeia were because Tarpeia was herself said to have been a Vestal, and so the ceremony resembles the cult of an ancestor by her descendants and as such belongs to the sphere of private religion. But this is a point upon which one cannot be dogmatic and assert an absolute negative. In fact our information about the religious beliefs and usages of the native stocks of Italy other than the Romans is woefully scanty: and it would not be a matter for great surprise if here and there under the influence of Greek ideas or by the natural evolution of native beliefs a cult of some particular spirit should have spread outside the bounds of his own kindred. But at least for the Romans such a development would have been foreign to the whole spirit of their policy and their worship. Whatever may have been the importance of the founder of a family, or its living head, to his own kith and kin, before the State he was only the The military organization of the Roman State, its long centuries of evolution, had repressed individuality in life, and the ghost of a great man departed was no more than the ghost of any other member of his order.

But in the sphere of the family it was otherwise. There the monarchical principle was supreme. The pater familias was absolute master of his small domain, exercising the powers of life and death. The worship of the family centred round the domestic hearth and the spirits who watched over its store, the Penates, and the Lar familiaris. Many authorities seen in the Lar familiaris, this presiding deity of the family life, the deified spirit of the founder of the family. The point is at least doubtful; and, whatever truth this view may have, the Lar familiaris was certainly in the eyes of the average Roman sui generis, he was the humble deity of the home and the family property: if his worship had as a matter of fact grown out of the worship of a deified ancestor that fact of the remote past had long since sunk into oblivion.

But of his duties to the dead of his own family with whom he had had affectionate intercourse during life the average Roman was deeply conscious, as deeply conscious as his ancestors of the stone and bronze ages had ever been. We cannot unfortunately trace the succession from century to century over this long lapse of time. And it is only when we come down to the third century B.C. that, the practice of funeral inscriptions beginning, we can begin to form some idea of the feelings with which the average Italian regarded

his dead. The earliest inscriptions, found upon cinerary urns or inscribed upon egg shaped cippi or the square bases on which these monuments were placed, contain only the name of the deceased with that of his father, and in some cases the day of the month on which he died. Later, when elaborate tombs began to be built, these simple inscriptions were enlarged, sometimes in prose, sometimes in rude verse, into a eulogy of the deceased. The most celebrated of these earlier inscriptions are the epitaphs of the Scipios, found upon sarcophagi at Rome in the 17th and 18th centuries and now in the Vatican Museum. The name of the deceased is painted in red upon the lid, while the laudatory inscription is cut upon the side of the sarcophagus.

But towards the end of the Republic the simple form of these inscriptions begins to undergo a notable change. The tomb and the epitaph are put by a dedication under the protection of the Di Manes, and the inscription from being what it seemed to be before, a merely secular record of a name and a career, becomes a titulus sacer, a sacred inscription. What is the explanation of the change? Here we must be on our guard against too facile assumptions based upon considerations of a growing interest (whether due to the influence of Greek speculation or Eastern mystery religions) in what is now called eschatology. It is true that adherents of philosophical schools began to speculate upon the problems of human immortality, and that many believers in the pagan mysteries felt themselves to have secured it by undergoing various purificatory and initiatory rites. But these were after all in a minority, and their beliefs do not seem to have affected the general attitude towards the dead: certainly they had no effect in modifying ancestral usage. And that usage from the earliest time demanded that a certain reverence should be paid to the tomb. The word silicernium, which denotes the funeral feast, that relic of the usage which we seem to recognize in the doubtful remains of the stone age, is one of the oldest words in the Latin language, and the festival of the Parentalia, of the offerings at the tomb, would never have made its way into the Calendar if the usage of making such offerings had not been universal. And we must not be misled by the apparent simplicity of the earlier funeral inscriptions as compared

<sup>1</sup>Dessau op. cit. 7818 ff.

with the later. The truth seems to be that the later only make more explicit and detailed what was implicit in the earlier. It is noteworthy that the urn or the sarcophagus bears the name of the deceased not in the genitive but in the nominative case, denoting not that the urn is the property of or belongs to the deceased whose ashes are in it, but that it and the ashes are in some sense still identical with the deceased. And so they are treasured with care and stately tombs are built to receive them. When, then, at the end of the republic the tombs begin to bear the letters D.M. or D.M.S., Dis Manibus Sacrum, "sacred to the spirits" this means no more than a change in fashion, a change indeed that was not universally accepted: for very many of the tombstones of imperial times are without the consecrating letters.

But that the tomb, whether with or without these letters, was looked upon as an abode of the spirits is made explicit in the inscription which many of them bear. And not merely is the spirit assumed to be in the tomb, but to be capable of being approached there and having respect paid to it. "The spirit of L. Baebius Secundus lies here," says an inscription from Nîmes1: "Eutychianus and Modestus have here laid the spirits of their former masters," says an inscription found at Rome<sup>2</sup>: a Roman inscription of the second century B.C. runs in rude saturnian verses: "this is the memorial made for Marcus Caecilius. Stranger, it is pleasing that thou dost halt before my abode; mayest thou prosper and be in health and have sleep free from care': 3 here, as often, the deceased has engraved upon his monument the greeting which his silent spirit would fain make to its visitors. And here is another inscription from Rome,4 "Sacred to the worship of a good spirit and to the ghosts. Furia Spes to L. Sempronius Firmus my dear husband. From the day I first knew him, as boy and girl we were bound together in love: with whom I lived but a little while, and when we ought to have been living still we were severed by an evil hand. Therefore I pray, O most sacred ghosts, that ye have my dear one in your keeping, and that ye show him your favour in the night time so that

<sup>&</sup>lt;sup>1</sup>Dessau op. cit. 8020.

<sup>2</sup>Ibid. 8021.

<sup>3</sup>Ibid. 8121 cf. 8190.

<sup>41</sup>bid. 8006.

I may see him, and that he may persuade Death for me so that I may the more gladly and quickly go to be with him." This last inscription pushes the general belief to somewhat extravagant and unusual lengths: not only is the spirit of Furia's husband in the tomb, but the possibility of his visiting his wife at night is expressly mentioned: but though we can parallel this belief from the Declamations of Quintilian, and it may have been common, yet such expressions are seldom recorded upon tombs. But the general tenor of the inscriptions allows us to draw certain conclusions with reasonable certainty: the spirit of the dead, though it had joined the Manes and was but one of their company yet in. some special sense was attached to the particular spot in which its bones or ashes were kept: it had a certain interest in what went on around it: it is represented as being grateful to the passer by who stops even to read the inscription. And it is grateful too in its tomb if its wishes are carried out. An inscription from a tomb at Praeneste<sup>2</sup> records the wishes of the deceased Aurelius Vitalius who, with his wife Aelia Sofias and many of his relatives, lies interred there. He had belonged to a club called the Syncratii, and after enumerating his wishes with regard to the future use of the tomb he concludes "And this request do I, one of the Syncratii, make of all of you my fellow members that ye comfort a poor old man," evidently by attending to his wishes and visiting the tomb to which he desired they should one and all have access after his death.

It is true that not all the inscriptions give evidence of this simple faith. Sometimes a doubt is hinted as to the reality of the continued consciousness of the dead. Sometimes this belief is boldly expressed as though in protest against the accepted view.<sup>3</sup> One monument in Rome<sup>4</sup> has an inscription in Greek forbidding the survivors to offer incense or garlands, or light the customary lamps or make the customary libations, but to heap earth over the remains with the words, "He has again become what he was when as yet he was not."

But this life in the tomb is not one which anyone regards as desirable. At best the language of resignation to the

<sup>1</sup>Sometimes the dead are represented as avenging themselves upon those who violate the tomb: cf. Dessau op. cit. 8199-8201.

<sup>2</sup>Dessau op. cit. 8090.

<sup>&</sup>lt;sup>3</sup>Dessau *op. cit.* 8128. 4*Ibid.* 8156.

common lot serves to veil the truth: at the worst the dead addresses the survivors with the cynical advice to make the most of the time while they are alive: to eat, drink and make love, which is all that the dead remembers with pleasure in the place where these joys are no more.

Now what cult, what repeated ceremony of remembrance and respect, was observed at the tomb? seen that from time immemorial in Italy the funeral feast was celebrated as part of the actual obsequies; and the festival of Cara Cognatio which I have mentioned was an annual feast held by the members of each family in memory of its dead. But the inscription of the Imperial epoch<sup>2</sup> reveal to us a much more elaborated remembrance than any which we have evidence of at an earlier epoch. due performance of these ceremonies was valued and expected is shown by the elaborate care which is taken to provide for them. The tomb is provided with rooms and appurtenances for the ritual of the dead: grounds<sup>3</sup> are laid out around it with fruit and flowers to provide for the festival: sums of money4 or house property5 are bequeathed to defray the expenses of the ceremonies, and sometimes the details are minutely described in the funerary inscriptions.

In place of the one festival of the Parentalia we now find at least four feasts at which the memory of the dead is celebrated: first and chiefly on his birthday, then at the feast of violets on March 22, again on the feast of roses in May, and lastly on the old festival of the parentalia. Sometimes on one or other of these, sometimes on all of them together, the friends met, either at the tomb where (in the case of wealthy families or of corporations) a dining room was provided, or in its vicinity, and feasted together in memory of the dead. On the festivals of roses and violets these flowers were scattered over the grave, an extension of the usage which Pliny tells us was an old Roman custom, of hanging garlands of flowers on the tomb. Sometimes on these festivals sacrifices were offered to the spirit of the

<sup>11</sup>bid. 8130, 8155, 8158.

<sup>2</sup>Dessau 8235, 8274, 8336-7.

<sup>31</sup>bid. 8342.

<sup>41</sup>bid 7258.

<sup>5</sup>Ibid. 8366.

<sup>61</sup>bid. 8366.

<sup>7</sup>Plin. N.H. xxi, 3.

<sup>8</sup>Dessau 8360-1, 8364, 8366.

departed or wine poured upon the receptacle containing the ashes, which was in consequence often spoken of as an altar. And lights<sup>1</sup>, too, were kept burning in the sepulchre, one inscription<sup>2</sup> directing that a lamp should be lighted and placed on the tomb on the 1st, 5th and 13th day of every month each year.

But the ceremony of the funeral banquet was not merely, as it seems to have been at the Republican festival of the Cara Cognatio, a simple gathering of kinsmen in commemoration of the departed. The dead man himself was supposed to have his share of the feast, and the feast in some inscriptions<sup>3</sup> is said to be spread for him (sibi, ci poni). Such a ceremony must have reminded those who took part in it of the solemn lectisterna in the temples of the gods at which their images were placed on couches round the offerings and they were supposed in some mystic sense to feed upon dishes spread before them. In the same way the deceased was present at and partook of the banquet held in his honour, for which, indeed, he had himself often provided in his testament.

But while these family feasts could be held at the grave without inconvenience in the chambers provided for that purpose in the elaborate sepulchres of the wealthy, and while a donation of the deceased ensured that the recurrent expense of the upkeep of this and the other ceremonies should not prove irksome to his descendants and be in consequence discontinued, such remembrances could not grace the sepulchre of the poor man or of the slave. They had to be content with a niche in one of the columbaria or catacombs, with an olla placed in a recess of the wall, with nothing to distinguish it from its neighbours to right and left in long rows beyond the simple slab on which there was room for little more than the name of the occupant. And a wealthy patron often provided at least for his freedmen and freedwomen in this way by granting to them and their descendants the right of depositing their remains beside his own. The motive for this was not always purely philanthropic. In a surprising number of the inscriptions in which this privilege is granted it would appear that the owner had left no son or daughter upon whom he might

<sup>11</sup>bid. 8132, 8156.

<sup>21</sup>bid. 8366.

<sup>3</sup>Ibid. 8369, 8371-2.

rely for the due fulfilment of the last rites at his grave: and the freed slaves were given a right of burial in his monument to ensure that his own cult might be kept up by those whose interest it was not to allow the burying place to fall into disuse: though, indeed, it must be added that many of these inscriptions leave upon the reader the strong impression that the bond which in this period united the patron to his freed slaves was very close and intimate.

But what of those who had no wealthy patron, who could at most hope to purchase in a columbarium a solitary niche, near which no funeral feast could be spread even were there those surviving who might care to feast if they could? The precautions which were taken to secure this show how deeply rooted was the desire for this posthumous intercourse with the living, how strong was the longing for survival in the thoughts and interests of their surviving To this the collegia tenuiorum bear their eloquent testimony. The poorer formed themselves into societies, often assisted with money by some kindly patron, whose name is inscribed in their records with blessings on his memory, the object of which was to ensure for the members a resting place in some common sepulchre and the certainty that after their death they would be remembered in the common feast for which the statutes of the society provided. The Imperial Government watched these gatherings of the poor with a jealous eye, refusing them leave to meet more than once a month, lest the meeting of so much misery might engender discontent. Or again the guilds of the various trades and occupations, the fullers, the bakers, the boatmen, the masons, might combine to purchase a common resting place to which all who had belonged to the guild might claim entrance at last and be sure of at least some kind of remembrance.

Thus in the year 153 A.D.<sup>2</sup> a lady, Salvia Marcellina, the wife of a freedman of the curator of the Imperial picture galleries gave to the society which bore the name of the College of Aesculapius and Hygia at Rome a plot of land with a shrine and a pergola, along with a statue of Aesculapius and a building for their feasts. To these she added a sum of 50,000 sesterces, to which a further sum of 10,000 sesterces was added by P. Aelius Zenon, a freedman of

<sup>&</sup>lt;sup>1</sup>Marc. *Dig.* 47, 22, 1. <sup>2</sup>Dessau *op. cit.* 7213.

the Emperor. This society was a funeral society to which the members contributed subscriptions for the purpose of providing a burying place. The liberality of these friendly donors enabled them now to hold a funeral feast as well, to be defrayed out of the interest of their donations. Therefore they met to the number of 60 for a humble meal of bread and wine on the day of Cara Cognatio and on the festivals of violets and of roses in remembrance of their dead comrades. The desire of the dead for such a commemoration and of the poor survivors for the means to supply it must have been strong indeed when such donations, of which this is only a sample, were so frequently made.

For it must be remembered that it was only when such ceremonies were observed by the living that the dead retained any kind of shadowy existence. Outside the circle of the philosophers and the Eastern mystery religions, and of the ever growing circle of the Christian Church, the ancient Italian had no definite creed and no fixed or logical belief on the state of the dead. He had a confused notion that death conveyed the departed to the dark realm of the Di Manes beneath the earth, absorbed in whose dim multitudes he could no longer claim a personal identity. But the Di Manes were potent beings whose wrath must be averted and whose favour might be won; and where so surely as at the spot where one who had joined their company was interred? And so the sacrifices and libations at the tomb were a form of worship offered to these infernal powers. But at the same time they seem to have held to a vague belief that somehow in the tomb the shade preserved a kind of relative identity. He felt glad when the passers by saluted his resting place and uttered a word of greeting. He was refreshed by the wine poured upon the ashes which once were his body: he knew that spring and summer had come round again when their symbols, the violets and the roses, often plucked in the garden which he himself had planted in anticipation of his posthumous longing, were laid by pious hands upon his tomb; and in the funeral feast of his old comrades, on the anniversaries which he had himself so often kept, he took a shadowy and wistful part. Such was the survival to which the dving looked forward; while these ceremonies were observed he felt himself not altogether merged in the obscurity of the nameless spirits: when they were intermitted and gradually ceased he passed by slow and silent stages into the nothing from which at his birth he had emerged.

It is a far cry from the second millenium B.C. to the vear of our Lord 385. But the development is continuous. The dead of the neolithic age lay as in sleep with the objects he had used in this life around him, sometimes in a chamber hollowed in a rock not far from the houses of his kin, who had taken leave of him at a solemn feast and left with him provisions for his sustenance. The Villanovan ancestors of the Latin people, cremating their dead, put with them in their urns some memorial of the life they had left, and even modelled the urns upon the huts of wattle and clay or the houses of wood to which they had been used. The stately mounds or circles in which the Etruscans placed the skeleton or the ashes were filled with vessels and lamps and candelabra and their burial chambers were adorned with statues and paintings to serve the pathetic illusion of continuity. And beside the splendid interments of chieftains and warriors at Vetulonia and Chiusi we find the shallow trenches in which the humbler dead are laid, death keeping no better thing in store for them than what they had known here. And in the second century B.C. the stately sarcophagi of the Cornelii offer the same contrast with the names upon the humble urns of Praeneste. Nor do the elaborate stones of the Imperial age tell any new The feelings of antiquity have become more vocal, the customs have not changed their nature though they have assumed new forms. And so when Postumius Julianus of Praeneste leaves his strange legacy to his townsmen he is expressing almost for the last time the fears and the hopes that had been felt for almost three milleniums at Praeneste. He must not be forgotten for ever: his townsmen are to have it made easy for them to recollect him: they will feast with him and to his memory while the land he leaves them bears corn and fruit: and they will by their remembrance and their libations give to his spirit that worship which ever since human eyes first looked upon Italy had been paid to their dead by generations of his country men.

#### DR. WILLIAM DRENNAN.

# By Ruth Duffin.

William Drennan, born May 23, 1754, was the youngest child of the Rev. Thomas Drennan, minister of the First Congregation of the Non-Subscribing Presbyterian Church, Belfast. His mother, Anne Lennox, was the daughter of Robert Lennox and Martha Hamilton, whose father, John Hamilton (died 1686) was Sovereign of Belfast, and a descendant of one of the seven sons of that Hams Hamilton, Vicar of Dunlop, in Ayrshire, from whom came the Hamiltons of Clanbrassil, Killyleagh, and Mount Collyer.

William Drennan was the youngest of nine children, of whom only three, the other two being Martha and Nancy, lived to grow up. His father died when he was thirteen, and at the age of fifteen he entered Glasgow University. taking his M.A. degree in 1771. In 1773 he proceeded to Edinburgh to study medicine, and took his M.D. degree in 1778. He practised first in Belfast, but in 1782 removed to Newry, where he lodged at Mr. Maxwell's, Market Street. Thence, in 1789, he went to Dublin, where he remained until 1807, living first in Dame Street, and afterwards in Marlborough Street. He married, in 1800, Sarah Swanwick, daughter of John Swanwick, of Wem, in Shropshire, by whom he had several children. Those who survived were William Lennox Drennan, a barrister, Dr. John Swanwick Drennan, Lennox Drennan, and Sarah, who married John Andrews, of Comber. In 1807, Dr. Drennan returned to Belfast, at first to Donegall Square South, and afterwards to Cabin Hill, and died on February 5, 1820, at his sister's house in Belfast.

Such are the outlines of his life, which (in addition to his professional work), was filled by many interests,

domestic, political, and literary.

From his youth up he was an ardent politician. In 1778, the year in which he took his doctor's degree, he entered, as he says himself, "with ardent zeal, into the first Volunteer Association made in this kingdom, and was among the first, and among the last, in that ever-memorable institution." He was all his life a warm advocate of Catholic Emancipation, and of Parliamentary Reform, and he felt that all Irishmen should unite in demanding these two measures. It was in his mind, as is shown by his letters,

that the first idea of the Society of United Irishmen arose. He was the author of their Test, and though not himself an advocate of extreme measures, he did not escape political persecution, for in 1794 he was tried as the author of "a wicked and seditious libel "-the address to the volunteers from the Dublin Society of United Irishmen, which had appeared in 1792. He was defended by Curran, and acquitted. He did not follow the United Irishmen into rebellion, and appears to have retired, at any rate from active membership, before the rising of 1798. He was, in theory, a Republican, and protested against the Act of Union: but at a town meeting of Belfast in 1817, he "begged leave to assert that, in the event of a full, free, and frequent representation of the people in Parliament for the whole Empire, he would be reconciled to the Union. He would, not unwillingly, merge his country in a fair and faithful representation of these realms."

During his career he wrote many pamphlets on political subjects, the best-known being the "Letters of Orellana, an Irish Helot." He was a man of cultivated literary tastes, and something of a classical scholar, as was his father before him. He translated the Electra of Sophocles into English verse, and in 1815 his collected poems were published under the title of "Fugitive Pieces." Of these poems the best remembered are "Erin," and "The Wake of William Orr." In the former the epithet of Emerald Isle was first used, in the verse,

"Arm of Erin! prove strong; but be gentle as brave.
And, uplifted to strike, still be ready to save;
Nor one feeling of vengeance presume to defile
The cause, or the men, of the Emerald Isle."

"In person," says his son, "Dr. Drennan was small (about five and a half feet), well-proportioned, and active, In feature, except the eyes, a fine hazel hue, not remarkable for comeliness or the contrary. Naturally grave, his smile, perhaps from its rarity, was very sweet. . . Abstinent in food, temperate in drink, and in morals irreproachable, he was no sour ascetic, or shunner of his fellow-men. An occasional diffidence in his own judgment would appear a failing to more presumptuous minds, and, perhaps, occasionally amounted to irresolution."

An unfinished portrait shows a clean-shaven, dark-complexioned man, with serious hazel eyes, and brown hair

brushed back from a fine forehead and tied with a ribbon. The face is grave and thoughtful, but not remarkably melancholy, as might be expected from his own self-portrait in verse:—

What a deep tint of gravity saddens that face! A smile evanescent, a lightening grace, Endeavours by fits, but in vain, to illume, And more clearly reveals constitutional gloom.

He further describes himself as

Man of taste, more than talent; not learn'd tho' of letters, His creed without claws, and his faith without fetters.

The completest picture of the man, is, however, contained in his letters, which clearly reflect his many interests and activities, and show, also, the lighter, wittier side of his nature. A correspondence of some 1,200 letters between him and his sister, Martha M'Tier, is in existence, and gives a vivid picture, not only of the two principals, but of old Dublin and Belfast, and of such more famous personalities as Lord Edward Fitzgerald, Wolfe Tone, Grattan, Curran, and Emmet, with glimpses of Mrs. Siddons in her heyday, of Edgeworth of Edgeworthstown, of Dugald Stewart, and other notabilities.

In his later years in Belfast, Drennan devoted himself to the cause of education, and was one of the founders of the Academical Institution, and co-editor of the Belfast Magazine. His interest in the Institution was strong enough to cause him to make a dying request that his coffin might be stayed for a few moments before its gates. He was borne to his grave, by his own wish, by six Protestants and six Catholics, and was buried in the "Old Poorhouse" graveyard in Clifton Street.

# ANNUAL MEETING

The Annual Meeting of Shareholders and Members was held in the Museum, College Square, on Thursday, 27th October, 1927, at 4-30 p.m., to receive the Council's report for the Session, with the Hon. Treasurer's Statement of Accounts; to elect five members to the Council of Management in place of five who retire by rotation and to transact such other business which may be brought forward pertaining to an Annual Meeting.

Mr. E. J. Elliott, F.R.S.A.I., President of the Society, occupied the Chair, and among those present were Prof. W. B. Morton, M.A., M.R.I.A.; Messrs. Wm. Riddell, M.A.; A. H. Muir, F.C.A.; Michael C. Andrews, M.R.I.A.; Godfrey Ferguson, F.R.I.B.A.; R. S. Lepper, M.A.; H. C. Lawlor, M.A., M.R.I.A.; David E. Lowry, J.P.; H. H. Jones, Joseph Skillen, Fergus Greeves, J. W. Gillmour and W. B. Burrowes, F.R.S.A.I. (Hon. Treas.).

Apologies for absence were received from the Rt. Hon. S. Cunningham, Dr. S. W. Allworthy, Professor Gregg Wilson, Professor James Small, Dr. Chart and Mr. T. Edens Osborne.

The Chairman called upon the Hon. Secretary to read the notice convening the meeting and also the Annual Report of the Council

## REPORT.

Your Council is now called upon to submit to the Share-holders and Members the annual report upon the work of the Session now closing.

#### DEATHS.

During the year the Society has lost by death two eminent shareholders who in the past have played a very practical part in the activities of the Society, namely, Francis Joseph Bigger, Antiquary, who died on the 9th December, 1926, and Nevin H. Foster, Ornithologist, who

died on the 23rd January of this year. To the relatives of the deceased members resolutions of sympathy from the Society were tendered by the Council. Obituary notices will be appended to the report.

#### MEMBERSHIP.

Last year it was reported that there were 284 Shareholders and Members as compared with 322 in 1925. This year the total number is 303. Your Council at the last Annual Meeting referred to the great importance of augmenting the membership if the work of the Society is to be sustained. The Council hopes that every effort on the part of members will be made to increase the membership during the year, and thereby strengthen the work of the Society.

## HON. MEMBERS.

Your Council has decided to add four names to the list of Hon. Members, viz.: Prof. W. B. Morton, M.A., M.R.I.A., for his services to the Society during his three years presidency; Mr. Robert J. Welch, M.Sc., M.R.I.A., for his contributions to the Natural History and Archæology of Ireland; Mr. Robert Bell for his distinguished service to the study of Geology and Mineralogy in the North of Ireland, one who is known throughout the British Isles as a field geologist; and the Very Rev. Dean Carmody, M.A., M.R.I.A., for his excellent work in connection with the History and Archæology of the North of Ireland, at Mahee Island, Lisburn, and elsewhere.

# TRANSFER OF SHARES.

Three shares, No. 214, registered in the name of the late R. M. Young, have been transferred to his son, Capt. J. R. Young.

#### BUILDING.

Some expense was incurred in repairs to the building owing to the damage caused by the gales, while defective drains in King Street Mews leading from the Caretaker's house had also to be put in order,

#### DECONTROL OF BIRDS.

Your Council having learned of the application made by the Ministry of Commerce to the Antrim County Council for the relaxation of the protection of the eggs of Blackheaded Gulls, Black-backed Gulls, and all species of Terns in Northern Ireland, and the compliance to the Ministry's application by the County Council who make the bird regulations for their area, forwarded a resolution to the Ministry and to the Antrim County Council protesting against the decontrol of these birds.

#### LECTURES.

The Session was opened on the 10th November, 1926, with an address by the President (Mr. E. J. Elliott) on "The Races of Europe"; Mr. Percy Allen finished his course on the Drama with a lecture entitled, "Our Modern Drama "from 1905 to the present day; Mr. John J. Ward, the naturalist, delivered a lecture on "Butterfly Marvels in Movement and Colour," illustrating his address with a remarkable series of bioscope films. Other interesting lectures were delivered by Prof. R. M. Henry on "The Cult of the Dead in Ancient Italy," Dr. R. H. Hunter dealt with "Man's Upright Posture," Dr. E. Norman Hay on "The Evolution of Discord in Music," Colonel Berry with Cathair Boirche," and Mr. David E. Lowry took as his subject "The Scandinavian and Irish in 10th, 11th and 12th Centuries.'' All the lectures were illustrated, well attended, and interesting discussions followed at the close of each. Your Council, however, feel that, owing to the increased cost of printing and other expenses, the Society will be unable in future to bring distinguished scientists to Belfast to deliver public lectures, and must reduce its efforts as an educational force unless a corresponding increase in its resources can be obtained.

## EXCURSIONS.

During the Spring your Council arranged for three excursions to places of interest, and, judging by the satisfaction expressed by those members who attended, the Council is of the opinion that this new activity on the part of the Society should be continued. The first visit was to

the Linen Industry Research Association at Lambeg, under the leadership of Dr. W. H. Gibson, O.B.E., when the members were kindly entertained to tea. The second was to Lisburn, under the guidance of Mr. W. J. Gillespie, where the members were welcomed by the Chairman (Mr. W. J. Law) and several members of the Lisburn Urban Council. The third was a whole day excursion to Templemoyle Abbey, Ballymarlow stone circle, Crebilly, Dunbought, Clough Castle, and Dunaghy Church Ruins, under the conductorship of Mr. H. C. Lawlor and Mr. Joseph Skillen.

## ARCHÆOLOGICAL SECTION.

The Archæological Section continues to be vigorous, but its Committee would like to see its numbers increased by the addition of more members of the Society joining. A separate report of the work during the year will be submitted to the Annual Meeting of the Section by its Committee to be held shortly.

#### EXCHANGE.

Your Society continues to receive the publications of the leading learned Societies in exchange for its own Proceedings. Many of these are of great scientific importance. Our Hon. Librarian reports that the Society's Library has not been used as much as its importance warrants. Your Council hopes that members will, in future, avail themselves more of its advantages.

## FINANCIAL STATEMENT.

The financial statement will be submitted by the Hon. Treasurer.

## COUNCIL.

To fulfil the conditions of the constitution of the Society five members of the Council retire from office namely, the Rt. Hon. S. Cunningham, Prof W. B. Morton, Messrs. F. Adens Heron, R. S. Lepper, and Wm. Riddell. All these members are eligible for re-election with the exception of the Rt. Hon. S. Cunningham and the meeting will be called upon to elect five members to the Council.

#### HON. TREASURER'S STATEMENT.

In submitting the statement of accounts for the past year, the Hon. Treasurer, Mr. W. B. Burrowes, reported that there was at the beginning of the year a credit balance of £1 2s 7d; this balance now stands at £44 4s 6d. A number of small accounts which came in after the 31st October were paid early in November, and are included in this statement.

#### ADOPTION OF REPORT.

The President (Mr. E. J. Elliott) alluded to the activities of the Society, and moved the adoption of the report, which was seconded by Mr. David E. Lowry, J.P., and unanimously passed.

# ELECTION TO COUNCIL.

It was proposed by Mr. Andrew Robinson, seconded by Mr. Fergus Greeves, that the following four members, namely, Professor Morton, Messrs. F. Adens Heron, R. S. Lepper and Wm. Riddel, be re-elected, with the addition of Mr. H. H. Jones in place of the Rt. Hon. S. Cunningham.

# THANKS TO PRESIDENT.

On the motion of Mr. J. W. Gillmour, it was unanimously resolved: -- "That we, the Shareholders and Members at this 106th Annual Meeting, desire to show our appreciation of the services rendered by our President during the year."

At the close of the Annual Meeting the new Council met to elect officers for the coming Session, when Mr. E. J. Elliott was unanimously elected President. The Officers and Council of Management for the Session 1927-28 will be found on page -.

## OBITUARY NOTICES.

NEVIN HARKNESS FOSTER, F.L.S., M.R.I.A., M.B.O.U. Some naturalists are born so; others become so, more or less influenced by various factors in their life; Nevin H. Foster was one of the former category, showing in early life that

love of birds and their habits which so developed in later life that he became one of the real authorities on the native birds of Ulster and indeed of Ireland generally. The eldest son of a Presbyterian clergyman, the late Rev. James Foster, of Newmills Presbyterian Church, Co. Tyrone, he was born at Brackaville, Coalisland, on March 18th, 1858. In early life he lived with his uncle, Rev. I. N. Harkness, at Stewartstown, where he first went to school, afterwards finishing his education at the Royal School, Dungannon. Serving his time to the staple trade of his native province the linen trade—he had, in a life lived mainly in the country, opportunities for his favourite study of Ornithology, for it was only one of his many sided activities in Natural History; he was a keen botanist so far as ferns were concerned and had a fine collection in his Hillsborough garden. A good many years before his death he commenced to study the Woodlice in connection with the Irish Survey of that, to many, uninteresting subject. To Foster hardly anything of nature was uninteresting and he gave the same careful attention to the Terrestrial Isopods that he gave almost all his life to the study of birds.

To the Irish Naturalist he contributed fifty articles or notes on on birds, with others on Bats, Foxes, Plants, etc., and many on the Woodlice of Ireland, collaborating with Mr. Denis R. Pack-Beresford, D.L., M.R.I.A., in a monograph of that group published in the Proceedings of the R.I.A. in 1911. In 1903 Foster was elected a member of the British Ornithologists' Union, in 1912 a member of the Royal Irish Academy, and a Fellow of the Linnean Society. He was for years an Hon. Secretary and also an Hon. Treasurer of the Belfast Natualists' Field Club and President of the Club in 1909-1910. In recognition of many services to the Club he was elected an Honorary Member in 1923, and in 1924 he received The Club's Commemoration Medal for his work in furthering the study of Natural History. Our Society had already elected him an Honorary Member in 1917 for his services in the cause of Natural Science in Ireland. He took an active part in the Triennial Conferences of the Irish Field Club Union, especially those of Sligo, Cork and Rosapenna, and was jointly responsible for the Terrestrial Isopods Report of the Clare Island Survey, assisting also in the Bird Report and collecting for that dealing with the Land Mollusca. His work well done,

he "crossed the bar" on the 23rd January, 1927, and was buried in the old Churchyard of Hillsborough, in the district where so much of his life's work was done.

R. J. W.

Francis Joseph Bigger, M.A., M.R.I.A., sprung from a very old Belfast mercantile family, was born there on 17th July, 1863, and educated at the Royal Academical Institution, of which his grandfather had been a founder. Trained for the legal profession, he established a large practice as a solicitor; but being of a literary and antiquarian turn of mind, he devoted much time to research into the history of his native land, more especially of Belfast and Ulster. His great knowledge, topographical, legendary, historical and genealogical, was ever at the service of others engaged in like pursuits, and formed the foundation of his many contributions to periodical publications at home and abroad, widely appreciated and justly esteemed.

He delighted in restoring old buildings, be they church or castle or wayside cross; searching for and marking the neglected graves of the worthy dead; and reviving folk music and song. For many years he edited a new series of the Ulster Journal of Archæology with ability and judgment, which like its predecessor contains a vast amount of information respecting the province. His home at Ardrigh on the slopes of the Cave Hill—a centre of much hospitality—became in time a museum of more than local interest; his gardens, the habitat of many rare plants, and his seaside residence at Ardglass, embellished with ancient plenishing, a popular local attraction.

His publications, numerous and various, cover a wide range, and he touched nothing he did not adorn. A welcome visitor all over Ireland, he lectured to popular audiences, bringing home to them the glories of the past and the lessons to be learnt in the present; and encouraged with purse and pen, irrespective of creed or party, every movement having for its object the real benefit of the country or the uplifting of the people.

Since 1888 he was connected with our Society, and sometimes addressed us, and he rendered valuable help in the production of our Centenary Volume. Many learned

societies, and our own University, acknowledged his worth by conferring upon him office and degree, and his death rendered the world poorer for many. He passed away on 9th December, 1926, and is buried amid kindred clay in Mallusk under the shadow of an Irish Cross, with the words of the Psalmist carved on it in the tongue of the Gaet.

J. S. C.

#### ARCHÆOLOGICAL SECTION.

#### SESSION 1926-27.

The 11th Annual Meeting of the Section was held in the Museum, College Square, on Wednesday, 7th December, Mr. R. S. Lepper, M.A., in the Chair. The Chairman called upon the Hon. Secretary, Mr. H. C. Lawlor, M.A., to read the Committee's Annual Report as follows:

Since our last Annual Meeting we have lost three members by resignation, and one by death; twelve new members have joined, and the membership now is 125, the largest since the foundation of the Section.

At the time of our last Annual Meeting three important ancient monuments were either in process of repair or their repair was under contemplation. Of these, the repair of the ruin of the Cashel at Drumena has been brought to a conclusion for the present, and Colonel Berry's report, which was read at our last meeting, will appear in the Proceedings.

With regard to Clough Castle, a report upon the experimental work will be read by the Honorary Secretary.

With regard to Struel Wells at Downpatrick, we are glad to report that the work proposed to be done on this site has now been satisfactorily carried out by local effort, so that this Society was not called upon to assist or take any responsibility in the matter. Credit for the repair of the wells is due entirely to the Down and Connor Historical Society, the actual organisation being in the hands of our member, the Rev. Leo. M'Keown, C.C., and his confrère, the Rev. M. J. Fullen, of Downpatrick. The local committee had the benefit of the professional advice of Mr. T. F. O. Rippingham, acting on behalf of the Ministry of Finance.

On the 10th of March, 1927, as desired by the Committee, the Hon. Secretary drew the attention of the Bally-

mena Rural District Council to the disgraceful condition of the Churchyard at Templemoyle Abbey, Kells, Co. Antrim, particularly as regards the desecration of the old O'Hara Tombs. The matter has been debated by that Council at several meetings since then, but beyond this, nothing has actually been done, as apparently the question of the ownership of the site and its precise boundaries are somewhat uncertain. We are glad, however, to report that owing to the influence of the press in the matter, the subject of the generally deplorable condition of old churchyards has been warmly taken up by eminent ecclesiastical authorities in districts as far distant as Wexford and Tuam, as well as in places near at hand, and already several very old and important tombs of historic families are being or have been repaired and put into good order, including the well known Balfour vault at Aghalurcher, Co. Fermanagh, and the MacNaghten vault at Bonamarghie, near Ballycastle: several others are likely to be dealt with soon.

In connection with the Ancient Monuments of Northern Ireland, we are glad to say that the Act of Parliament dealing with the preservation of these, which owes its existence in the first place entirely to members of the Archæological Section of this Society, has produced already excellent results. We are glad to report that the Ministry of Finance has tackled the mountain of work in this direction admirably. The Advisory Committee includes number of our members, and although the Act is little more than a year on the Statue book, a vast amount of work has been accomplished by the Government, and a still greater amount is on the way of accomplishment. We may mention only a few items; the ruins on Devinish Island have been thoroughly repaired, and those on Innismac-Saint put in good order; the Balfour Vault, the old Maguire side-chapel at Aughalurcher, Co. Fermanagh, has been repaired, and the very interesting monuments contained therein, exposed to inspection and preserved from further dilapidation; Ardtole church, and the adjoining souterrain long closed up, will soon be open for students of both mediæval and semi-prehistoric antiquities: the Government has also done much to preserve Greyabbey; then Dunluce Castle, so notable an historic monument of the history of Northern Ireland, has been handed over to the

Government, as an ancient monument under the Act, by the Earl of Antrim and Mr. Winston Churchill, the owners. Work for the preservation of this splendid ruin, is to be commenced at once. We mention the foregoing to show the activity being displayed by the Government of Northern Ireland in the direction of preserving what is left of the monuments of our northern history and archaeology. They are, of course, outside of the actual work of the Section, but are of particular interest to all members of the Section.

Your Committee desire to mention that the Government cannot possibly do everything, all at once; they have taken over all the old Board of Works monuments, and in one year they have done and are doing Herculean work, of which we have only referred to a portion.

Certain monuments of antiquity of outstanding importance are not in the care of the Government, and do not come directly under the Act. We refer to the church ruin on White Island, in Lough Erne. Up to a few years ago this church had a recessed doorway of the pure Hiberno-Romanesque design, the only example of its kind of pre-Norman period in Northern Ireland; this intensely interesting ruin contained in its walls two or more so called Shela-na-gigs, evidently remains of a still older Christian building. The Hiberno-Romanesque door has recently fallen; Miss Margaret Stokes fortunately recorded an exact illustration of the arch, and as all the stones are lying where they fell, a small sum would be sufficient to re-erect it. Then we have the famous Buna-marghie Friary at Ballycastle, the only late mediæval Franciscan Friary remaining in Northern Ireland, with its numerous sepulchral armorial stones, and links closely associated with Northern Irish history. This ruin, which is actually the property of the Earl of Antrim, is in the custody of the Ballycastle Rural District Council, and both the Earl and the Council are entirely sympathetic towards its repair, while the local people would help. We are of opinion that here are two monuments of national importance which come within the scope of the Archæological Section to attempt a repair and partial restoration. Several of our members, for instance Colonel Raines, Mr. D. E. Lowry, and the Hon. Secretary, have complied with the suggestion of the Ministry of Finance and sent in carefully made surveys and descriptions of several castles, raths, and other important antiquities in various parts of Down and Antrim.

During the year seven meetings of the Archæological Committee were held, all of which were well attended.

On the motion of Mr. E. J. Elliott, President, seconded by Mr. David E. Lowry, the report was adopted, and ordered to be forwarded to the Council for printing in the Society's Proceedings.

In the absence of the Hon. Treasurer, the Hon. Secretary reported that the balance to the credit of the Section was about £50 0s 0d.

The Chairman, Mr. R. S. Lepper, moved the following resolution standing in his name, of which he had given due notice:

"To consider the proposal of Mr. R. S. Lepper, Chairman of the Section, to amend Rule 13, so as to read as follows:—

"13. These Rules may not be added to or altered by the Section without such alterations having been sanctioned by the Council of the Society. Notice of any proposed alterations of or addition to these rules must in the first place either (a) be sent to the Hon. Secretary of the Section for early submission to the Archæological Committee, or (b) be proposed in the Committee by a member of it. The Committee shall then, within six weeks of its receiving the proposal, lay it, for acceptance, amendment or rejection, before a meeting of the Section. The original proposal shall be communicated by the Hon. Secretary to the Section members at least a week before the date of this meeting, but amendments to it may be moved at the meeting without previous notice."

The above resolution was seconded by Colonel Berry.

Mr. Robinson moved as an amendment, and Colonel Raines seconded, "that the words after the word 'place' be deleted, and the following substituted—'be signed by twenty members of the Section for consideration by the Archæological Committee. The Committee shall then, after consideration and approval of the alteration, lay the same before a duly convened general meeting of members of the Section, accompanied by a definite expression of its opinion

thereon; and such proposal shall not be ratified by the general meeting unless passed by a three fourths majority of those present and voting." The resolution, as amended, was unanimously passed.

Mr. Rhys-Pryce suggested that there should be quarterly meetings of the Section at which papers of Archæological interest might be read by members, and the Hon. Secretary was instructed to bring the matter before the next meeting of the Committee.

At this stage the President, Mr. E. J. Elliott, took the Chair for the election of the Officers and Committee.

#### ELECTION OF CHAIRMAN.

Mr. Lowry proposed, and Colonel Berry seconded, that Mr. R. S. Lepper, M.A., F.R.Hist.S., be re-elected Chairman for the coming Session.

The Hon. Sec., Mr. H. C. Lawlor, proposed, and Mr. Deane seconded, that the Very Rev. Dean Carmody, M.A., M.R.I.A., be elected Chairman.

The Very Rev. Dean Carmody proposed, and Mr. Lepper seconded, the election of Mr. Andrew Robinson, M.V.O., M.B.E., who declined.

The Chairman having distributed ballot papers the voting was as follows:

Dean Carmody ... 13 Mr. Lepper ... 9

The President having announced that Dean Carmody had been duly elected Chairman for the ensuing year, the Dean took the Chair.

It was proposed by Mr. Robinson, seconded by Mr. Deane, and resolved unanimously "that the members present desire to place on record their high appreciation of the services rendered by Mr. R. S. Lepper, M.A., F.R. Hist.S., as Chairman of the Archæological Section."

Mr. Robinson proposed, and Mr. J. T. Greeves seconded the re-election of Mr. H. C. Lawlor, M.A., M.R.I.A., as Hon. Secretary, which was carried.

The following were elected members of the Committee; Messrs. Heron, Robinson, Chart, Richmond, Lepper, Lowry, Osborne, to whom are added the ex-officio members, Messrs. E. J. Elliott, Arthur Deane, W. B. Burrowes, who with Dean Carmody, and Mr. H. C. Lawlor, the Hon. Secretary of the Section, compose the statutory twelve members.

Appended are the reports of the work carried out at Drumena Cashel, Co. Down, and at the Ruins of Clough Castle, Co. Antrim.

# REPORT ON THE WORK CARRIED OUT AT DRUMENA.

By Colonel R. G. Berry, M.R.I.A.

Topography.—About three miles W. of Castlewellan along the Hilltown-Newry Road is Lough Island Reavy, with its cranoge and many other ancient monuments which belong to a time when its limits in water and bog were very considerably expanded. Rising up from the southern side of the lake is the long hog-back ridge called Drumena, lying N.E. and S.W., one of the foothills of the Mourne Mountains. On Drumena ridge are the remains of three cashels and a carn. On the N.E. slope of Drumena and close to the Lough Island Reavy—Tullyree-Bryansford road, about a quarter of a mile due E. of the eastern end of the lake is one of these cashels locally known as Walsh's Fort. It is here work has been carried out on behalf of the Society at intervals for nearly two years past. The site and its locality are shown on sheet 43 of the 6 inch O.S.

In the locality, lying between Hilltown and Dundrum, marked on the O.S. map, can be seen 120 megalithic and other monuments of antiquity, including two dolmens and probably the remains of a third, all of which are worthy of careful investigation, especially the ancient road which passes through the settlement and is locally known and marked on the O.S. as the Dane's Road as it passes through Burrenbane. A continuation of this road bears the same name in Tullyree, and as it crosses Slievenaman it is known as the Green Road and the Dane's Road. This road is also known locally as the Rough Road as it passes over Slievenaman and continues westward along the lower slopes of the Mourne Mountains. In the Martial Career of



Photo: T. E. Osborne.

Drumena Cashel during repair; from the hill on the south.

BRITISH MUSEUM 23 JAN 29 NATURAL HISTORY. Conghal Clairingneach (Irish Texts Society, vol. v.) the Rough Road is another name for the ancient road called Slighe Miodluachra.

In the immediate vicinity of Walsh's Fort and on the Drumena ridge especially, are many objects worthy the attention of the Society. To the S. and W. of Walsh's Fort and between it and Lough Island Reavy are certain megalithic remains which Mr. Robert Welch, M.R.I.A., &c., and others think might be the remains of a processional way—a suggestion I am inclined to accept, for up the hill to the W. of Walsh's Fort a trackway or "green road" does pass between huge boulders and describes a serpentine course in the next two fields towards the lake, here the stones are mostly lying, but the site is worthy of investigation and its relationship to Walsh's Fort and the Dane's Road (if any) should be established. The whole of this ancient settlement, the history of which is obscure and its name uncertain, is worthy of further investigation.

Original condition.—When taken in hand by the Society in the Autumn of 1925 Drumena Cashel or Walsh's Fort was in a condition of more or less ruin, and the timely intervention of the Society saved it from total destruction by the road contractor. Outside and inside, the cashel wall, some 10-12 ft. broad, and 2-5 ft. high, had given way on its outer and inner facings, and through the course of ages stones had rolled down forming a slope on either side of the wall varying from one in two to one in four. These slopes, and on the outside of the cashel wall a considerable distance beyond them, and the greater part of the interior of the cashel, was covered with a dense growth of whins or furze and the blackthorn, bracken and bluebells, pretty in their seasons, but of a very tenacious nature and difficult to clear.

Although the roots have been taken out of the soil and burnt there is now appearing once more a very undesirable crop of lusty young whins which in a few years would make the place again unapproachable if no provision be made to keep it cleared.

As the interior of the cashel was cleared it became evident that, besides the stack bottoms on its northern segment, there were other remains consisting of a rectangular outline of stones, some 35 ft. long by 18 ft, broad

at its western end and 12 ft. broad at its eastern end-this side was open and facing an entrance some 7ft. wide. On the sides of this rectangular space and attached to it were circular spaces. That on the south was paved, the stones being embedded in the clay, and was of somewhat irregular shape (as shown on plan), 10 ft. to 12 ft. in diameter, in the centre were the marks of fire. On the west side of the rectangular space was a circular space about 19 ft. in diameter outlined by stones embedded in the soil with others scattered about the centre. Beyond this, some 6 ft. further west, was the opening of a souterrain. To the north of this circular space and of the rectangular outline were two other spaces more or less annular in form. That Iving to the west was semi-circular in form, 18 ft. by 12 ft., and containing two spots outlined and paved with stones and marked with fire, evidently hearths some 3 ft, to 4ft, wide. This space was outlined with stones and earth somewhat raised. Beyond it to the east is an outline of stones shaped somewhat like a quadrant, this outline was not complete and was rather suggested.

The souterrain was open at its northern end for about 6 ft. of its length. At this end it does not rise to the surface but terminates abruptly. About 9 ft. of the shaft before reaching the cross arms was unroofed, the stones having fallen into the passage. About 3 ft. of the chamber roof had also disappeared. One stone, possibly a roof stone, was foriming a rough seat at the S.E. corner of the chamber.

A considerable length of the shaft was blocked with fallen stones from the roof and sides and with earth; the indications are that the earth was of comparatively modern deposit. The roof of the large axe-shaped chamber was complete except for one stone, and tradition reports that at some period this chamber had been used by poteen makers, of whom there still remains quite a vivid and affectionate local remembrance. The earth may be connected with this period.

The cashel wall varied from three feet to five feet in height, but parts had been reduced to only a foot or two.

It has already been mentioned that work was carried on intermittently. In these hard times the owner of the land wished to get all the benefit he could out of it, and this

was agreed to, although it hampered progress. The owner acted as foreman, and various connections performed the labour. These men only worked when attention to their crops and holdings permitted. At first they cleared the site. Then, with a view to finding the original face of the cashel wall, the interior slope was attacked, the stones loosened and thrown back preparatory to replacement on the wall. It was thus seen that the cashel wall was built on the surface, only a few inches below the present surface, its bottom course being 12 ft. broad and formed of large stones. On this bottom course were raised two dry-stone walls having a slight batter inwards, and the space between these walls was filled with loose stones of no great size, such as could be picked off the surface of the fields in the locality to-day. Some of the stones on the facing wall are of considerable size. The interior diameter of the cashel was about 120 feet.

The Cashel Wall has been repaired in places on the outside, the three drains have been cleared, showing openings roughly one foot square on the inside and 18 inches square on the outside. Otherwise, little has been done to the outside, and the slope of fallen stones still remains there, detracting from the otherwise imposing appearance of the walls.

Inside the cashel the ground has been thoroughly cleared. The fallen stones were cleared away from the base of the cashel wall until the original wall face and foundations were exposed. The original wall then varied in height from about one to one and a half feet up to five feet. On this the fallen stones were relaid after the manner of the earlier building. In my opinion this has been well done. We now have a cashel wall with an average inside height of six feet, in some places nearly eight feet. The thickness varies from 10-12 feet.

At two places the cashel wall was ruined to the bottom, and there has been much discussion as to where the original entrance was and if there was more than one. I have come to the conclusion that there was an ancient passage way communicating with the round house to the north near the modern road. When cleared, the foundations of the wall on either side of a narrow (53 inches wide) passage were found, and the wall rebuilt.

Of the round house only the form and some of the foundations remain. It is a circular depression, 16 feet in diameter, and 99 feet to the north of the cashel wall, close to the modern road, and not far from the ancient road. An ancient fairy thorn stands alongside its remains.

The opening on the east side is not, I believe, of recent origin. The entrance is roughly paved and edged by a row of large stones, independent of the foundations of the wall, and about 7 ft. wide on each side to mark its limits. entrance, if such it was, was, however, in such a ruinous and indefinite condition that, although the excavator was satisfied of its early character, others were not, and the Committee eventually decided to rag it off. If the cashel really had two entrances this would be admittedly an unusual feature, but it is to be noted that in a report made in 1904 by the late Monsignor O'Laverty, M.R.I.A., on this site and on a group of forts in the vicinity, which he identifies with Cathair Boirche, he mentions a cashel with two entrances. This report is given in the "Notes" to the translation of The Martial Career of Conghal Clairingneach, published by the Irish Texts Society, vol. V., pp. 204-5.

On the north side of the east entrance a hollow with roughly paved floor was revealed which suggested a guard house to the excavator, but the indications were too indefinite, and it was decide to ignore them.

The Souterrain is cross-shaped or axe-shaped, quite undefended, and usually lofty and wide, having at its head an apse containing an axe-shaped monolith, 2 ft. 3 ins. at base, and some 3 ft. 6 ins. high.

The shaft is roughly 50 ft. long by 37 ft. across the arms. The right hand or western arm is a chamber 16 ft. long, 6 ft. 4 ins. wide, narrowing to 2 ft. 3 ins., and shaped, roughly speaking, in the form of a stone axe; the opposite end opens with a step 18 ins. high, and tails off like the end of a pick as it approaches the surface, where it probably had a square-shaped surface hut about 6 ft. wide at its end. The floor here gives shallow layers of charcoal. Here came to light some of the very few finds, namely, some bones and a few pieces of early souterrain pottery of the type which Mr. Reginald Smith, of the British Museum, calls early British. One of the pieces has a band with thumb nail

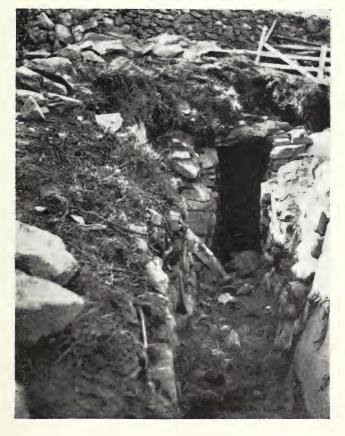


Photo: T. E. Osborne.

Drumena: Western arm of Souterrain after clearing debris of fallen roof.

BRITISH MUSEUM 23 JAN 29 NATURAL HISTORY. ornament. At the head of the shaft is a very curious apse, 4 ft. wide, 4 ft. 6ins. deep, tapering to 2 ft. 3 ins. wide across the large triangular monolith. In the Mediterranean region similar stones in corresponding positions are deemed to have a religious signification.

As already mentioned, the souterrain is in plan axeshaped. It is over six feet high and four feet wide in the main shaft, and there is an entire absence of any defensive arrangements. In this it is unlike any other souterrains, so far as I know, in this country, but others of the same type can be found in the Mediterranean countries.

Some nine feet of the main shaft and seven feet of the western cross arm have been restored with concrete slabs. The ventilator opening (1 ft. x 6 ins. high) up under the roofing slabs in the N.W. corner of the chamber is original. On the surface in the space between the arms and the main shaft paved areas have been found, but their purpose is not sufficiently indicated. At the entrance to the souterrain there is a small paved area ending in a crescent of stones, which might be a part of a hut circle, or merely a pavement, but it reminds the excavator very forcibly of similar crescents in front of sacred places.\*

Surface Remains.—Between the shaft of the souterrain and the larger eastern entrance lie certain groups or outlines of stones. They consist of a rectangle (35 ft. by 18 ft.) open at the east end, a circle (diameter 19 ft.) at back, touching the edge of the souterrain and the western end of the rectangle. On the south side is a circle (diameter 10 ft.) with traces of fire. On the north side there are two circular areas. One containing two hearths is 18 ft. by 12 ft. Between this and the triangular area is another circle of 12 ft. wide. The original stones still remain in situ undisturbed, here as elsewhere, but in clearing interior spaces other stones have been placed either between or on top of them. One of these circles appears to have been a sort of kitchen, it had two hearths lined with burnt stone. One hearth, the western, was in two layers. A later hearth with

<sup>\*</sup>See Rough Stone Monumeats by T. Eric Peet; Bradley's Malta and the Mediterranean Race; and reports of examinations by Professors Ashby, Bradley, Peet, Zammit and others, published in Archæologia, Man, Reports of British School at Rome, and Valetta Museum Reports.

hearth stones lay on top just below surface level. It was decided to raise this hearth stone, and another sunken hearth was found below. This was filled with round pieces of burnt granite (diameter 2-2½ inches wide) probably handstones or pot-boilers. Many others have been found about the place. Here also was found an axe-shaped piece of granite, unburnt, and other bactylic-shaped stones, for significance see Prof. Macalister's Ireland in Pre-Celtic Times, pp. 355 et seq., and before mentioned works.

The finds are very disappointing. No traces of metal, with the single exception of the leg of a bronze cauldron found just outside the eastern entrance, has been found. The souterrain pottery appears to be late compared to the granite axe and handballs. One very symmetrical quartzite tracked stone was found. Similar round stones and several cone-shaped ones were found in the souterrain and elsewhere, but not in such positions as to give any indication of their use.

Trial Trenches.—Trenches of various dimensions and depth have been dug at intervals. Two running N. and S. across the rectangular enclosure down to the tilth. No paved surface was found, but the tilth is only about 3 inches down. A trench was dug from N.W. corner of the souterrain at the ventilator opening, around the inside of the wall past the northern entrance, with no results; similarly with four other trenches dug from the N. and W. of the surface remains towards the cashel wall.

It is desired to emphasise that the groups of stones suggestive of building foundations were outlined by deeply embedded stones which are still undisturbed. In clearing the interiors of these groups other stones have been placed on top or at back of those already in situ. No stones have been moved to complete these alignments, except a few on the northern side of the oblong enclosure, and there is local evidence (Messrs. M'Carthy, Walsh, and others) to show that they were there originally, but were moved for stack-In fact the men who moved them put them back. Further, in Rev. Father O'Laverty's report, dated 1904, and already referred to, he speaks of "foundations of walls which once divided the interior into compartments" being there in his day. Mr. B. Walsh, the tenant proprietor, says they were as now all his days, and in his father's time before him.

In conclusion, the following measurements are given:— Cashel Wall.—8 to 10 feet high, 9 ft.-10 ft. 6 ins. wide at base, with a slight batter. There are no steps for mounting the wall, and it does not appear to have been terraced. The interior is an irregular circle, with diameters 126 ft., 115 ft. and 113 ft.

Souterrain.—Shaft, 50 ft. long, 4 ft. wide and 6 ft. high. Cross arms 37 ft. or more. Chamber, axe-shaped, 16 ft. 10 in. long, 6 ft. 4ins. broad inside, narrowing to 2 ft. 3 ins. The floor of the left arm is 1 ft. 6 ins. above the general level of the souterrain floor, and slopes up to the surface. Its inner entrance is about 4 ft. square, tapering to 2½ ft., where it enters the space probably occupied by a surface hut, perhaps 6 ft. square. At one time this passage has been covered, but the stones are no longer available, and it has been left open.

There are no signs of any continuation of the souterrain or of any other chambers.

Expenditure.—These excavations and the work done have cost the Society approximately £150. This amount includes all expenses from a period dating back to September, 1925, and may be distributed as follows:—

Clearing ... ... £10 13 0
Excavation (including work done on the wall) ... 102 16 0
Repairs to the souterrain ... 22 14 0

It is not possible to separate the actual cost of digging from that of rebuilding the cashel walls, as the two were carried on concurrently. The outside of the cashel wall has barely been touched, some gaps have been built up. To complete the work by replacing stones lying on the outside of the cashel wall would cost, perhaps, another £30. If this were done the walls would stand about ten feet high.

Owing to the cost, a continuation of excavations on this site is not recommended. More return could be obtained for the money expended by examining some of the ancient monuments in the locality, especially those in the immediate vicinity of the ancient road, known as the Dane's Road, and the course of the road itself should be investigated, as this appears to be of great importance.

This ancient road passes nearby. It is locally known in Burrenbane and Slievenaman as the Dane's Road, also in Slievenaman as the Green Road, and generally throughout the neighbourhood as the Rough Road.

As the term Rough Road is an equivalent in *The Martial Career of Conghal Clairingneach* (I.T.S., vol. v.) to the ancient "Great Way" of Miodhluichra (*Slige Midluachra*) which originally led from Tara to Emania and Dunseverick, it is though that this ancient roadway, after the destruction of Emania, may have been diverted to the new Ultonian capital at Downpatrick, passing just north of the Mourne Mountains through this district, which is so full of ancient cashels and other prehistoric monuments (vide Hogan's *Onomasticon Goedilicum*, p. 613).

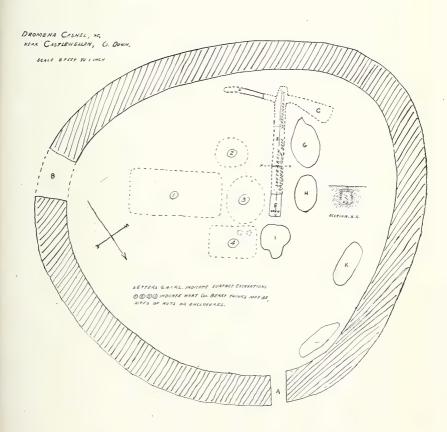
[While the Archæological Committee has recommended the publication of Colonel Berry's report upon his work at Drumena, it does not accept any responsibility for several of the theories which he puts forward, for which it thinks evidence is lacking.]

# DRUMENA CASHEL.

# Note to Plan.

The Cashel is situated near Castlewellan, Co. Down, a little to the south of the Castlewellan-Hilltown road. Its major diameter is 128 feet and minor 115 feet. The wall averages 11 feet wide at the ground level, 8 feet wide at level of existing top, as recently reconstructed in parts, and is built of stones set dry, i.e., without mortar or clay, and a considerable proportion of the stones are small. The surface of the ground along the line of the major diameter is practically level, but on the line of the minor diameter, that is from S.W. to N.E., there is a fall of about 6 ft. 6 ins. towards the entrance at A. This entrance is presumed to be, and probably is, the original and only entrance to the Cashel. From this entrance the ground falls rapidly towards the N.E. There is a break in wall at B about 12 feet wide, made presumably by the farmer to enable him to cart grain and hay into the Cashel for purposes of stacking

The souterrain within the enclosure is rather more extensive and elaborate than some of these structures are usually found to be, and besides being interesting in construction, is unusual in plan. The "deep" entrance to it



BRITISH MUSFUM 23 JAN 29 NATURAL HISTORY. is towards the north eastern end, and the lines of a shallow entrance and exit near to the Cashel wall at the S.E. is shown at D. Some repairs to and partial reconstruction of the roof of the souterrain and chamber have been carried out under the direction of Col. Berry.

The letters G, H, I, K, L on plan indicate the sites of shallow surface excavations made recently, but as these did not reveal anything of importance, exact measurements

were not made.

The dotted lines, figures (1), (2), (3), (4), indicate what in Col. Berry's opinion may be the sites of huts or enclosures of ancient date, but nothing substantial was found to support this theory. The presence of stones which appeared to have been subjected to fire action is not conclusive proof, and in the absence of other and clearer evidence is of doubtful value even by way of corroboration.

ANDREW ROBINSON.

# REPORT ON THE RUINS OF CLOUGH CASTLE, CO. ANTRIM.

By H. C. LAWLOR, Hon. Sec.

This ruin lies exactly nine miles due north of Bally-That the site has for many centuries been one of great importance there can be no doubt, though unfortunately very little is known of its history. Few places that I have met with rejoice in so many names; the oldest is Dunaghy, which is still retained as the name of the parish and church. The name Clough, a stone or rock, arises from the basaltic hill on which the castle ruin stands; in a treasury roll of Edward III is mentioned the manor of La Pere in North Antrim, which is probably a contraction of the French La pierre, "the stone," and may be this place. Sometimes the two names are combined, and in the Marquis of Antrim's patent of 1665 we find it Clough-Maghera-Dunaghy, alias The Old Stone, under which name it was re-created a Manor. In Speed's map of 1611, it is marked Cloughmaghera Duory, while in later maps it is marked Galdenagh or Cloughgaldenagh; I cannot interpret the two latter names with certainty. Duory means watery, so that Clough Maghera Duory would be "The Rock of the Watery Plain."

The castle rock resembles a miniature Edinburgh castle rock. It measures roughly 250 yards N. by S. and 40 yards E. by W., rising gradually from the north to the south, where it attains a height of about 35 feet.

A deep trench cuts off the southern end from the northern, which gives the whole the appearance of a Norman mote and bailey castle, the mote or chief stronghold being

the thus isolated high southern end.

The Rev. Wm. Mayne, writing in 1814, in his contribution to Mason's Survey, mentions a then widely prevalent tradition, that the castle had been a seat of the old M'Quillins, and as the M'Quillins were the descendants of the old Norman de Mandevilles, there can be little doubt that the original castle was one of the early mote and bailey examples, dating probably from about 1180.

When the M'Donnells expelled the M'Quillins from their territories about the year 1560, they erected several new stone castles in North Antrim, such as Red Bay, Dunananey and Clough. The then prevailing design of these relied chiefly on a massive and strongly fortified gate tower, leading to a courtyard surrounded by high embattled

walls.

Between 1560 and 1640 we have little information regarding Clough Castle. By a deed of October 20th, 1640, Randal, Earl of Antrim, demised the fourteen guarter lands of the Manor of Ouldstone, with the markets and fairs, the pound and pinfold, with the houses, cabins and gardens thereof, excepting the two houses owned by Alexander and Neale M'Naghten, and the Castle, otherwise the Manor House and Bane (bawn), to Symon Hillman, Alderman of Coleraine, for 99 years. The covenants stipulated that Symon was to expend £300 in building houses and settling ten English families there within the three years next ensuing; he was also to repair and keep in repair at the Earl's expense the Castle and bawn, and to expend also at the Earl's charge 50 shillings per year in turf and firing "for the ayreing of the roumes of the said house and Castle and household stuff therein." Further the tenant was "to provide hay, stroe and grasse sufficient for the horses of the Earl and his servants and attendants, and root herbs and potherbs." provided the Earl did not stay longer than ten days at a time. He was also to maintain a sufficient house-keeper in the Castle and "to perform and satisfy a reason-



Photo: H. C. Lawior.

Clough Castle, Co. Antrim; Remains of the Gate Tower.

BRITISH MUSEUM 23 JAN 29 NATURAL HISTORY. able part and share of all riseinge out and genrall hostinge required to be done . . . in his Majesty's service." The rent was to be five pounds a year and the best beast in possession of the tenant as heriot. The tenant was to have the use of the Earl's brewhouse and stables when he was

not requiring the same.

The Rev. George Hill, in his M'Donnells of Antrim, gives an account of the tragic events here at the beginning of the civil war in 1641. No actual records are available dealing with the fate of the Castle when the parliamentary troops regained the upper hand, but the tradition is widespread in County Antrim that both Clough and Red Bay Castles were completely destroyed by order of the English Parliament, and inspection of both places affords ample confirmation that this was carried out. In Clough the walls of the bawn were thrown over the edges of the hill, and the stones have long since been used up for building houses. A portion of the great fortified gate still remains, but no other fragment of Sir James M'Donnell's crection.

From the Rev. Wm. Mayne's description, and the account of the late Dr. M'Cay, of Clough, who remembered the ruin from 1850, no further destruction of the gate has

occurred during the past 100 years.

For the past 30 years or more, builders and road makers were in the habit of quarrying rock from the sides of the mote or southern end of the rock, and this work has increased rapidly during the past few years, since the motor traffic called out for constant renewal of roads. In 1926 the quarry had eaten into the mote so as to undermine certain fragments of stone walls which were traceable on the summit of the mote. From the Rev. Mr. Mayne's account of these foundations in 1814, it was evident that up to recently they remained exactly as they were in his day.

The Archæological Committee desired me to take steps to see if further destruction could be stopped, at least until these fragmentary ruins could be investigated. The proprietor, Mr. James Gregg, met the Committee's representations most handsomely, and closed the quarry. A sum of £20 was voted, and Mr. Gregg very kindly undertook to engage and superintend careful men to examine the buried foundations, which investigation was carried out in the spring of 1927, Mr. Gregg giving his valuable help free of

all cost. Enough of the debris covering the wall foundations was removed to show that they were the remains of a house measuring in plan 56 feet wide by 46 feet back to front. Among the debris were found fragments of domestic pottery, early bricks, portions of diamond pane lead glazing, etc., all of which Mr. Dudley Westropp put down to 17th century. There were also found fragments of thick roofing slates, none perfect, and fragments of glazed pottery gully tiles of possibly as early as the 15th century. A few bones of ordinary domestic animals were found, none of which differed from the ordinary modern requirements of the dinner table, except a few bones of red deer. But up to within living memory, many of these were kept in the great parks of nobility, and were commonly used as food by the wealthier classes.

The debris covering the wall foundations consisted almost altogether of decayed mortar, mixed with surface soil brought down by the action of worms, and some evidence of charred wood. It is noteworthy that hardly any loose stones, and no perfect roofing slates or tiles were found. The plan of the building showed that the house was of ordinary type, consisting of a hall or lobby and four rooms per storey; the south east room, paved with irregularly shaped flat stones, was the kitchen. How many stories the house had, we could find no evidence to show, but probably two stories and attics.

From the foregoing it seems evident that some time after the destruction of Clough Castle about 1650, some one erected an ordinary dwelling house on the mote, using some of the materials of the destroyed castle in its construction; this would account for the presence of the fragments of 15th century roof tiles, and possibly for the presence of such very heavy slates, which run up to nearly one inch in thickness and come from a local quarry, long since disused owing to its products being too heavy. It also seemed evident that the house had been burned, and the useful salvage remains removed for further use elsewhere. It may be asked why anyone would build a house on such an inconvenient site, where every drop of water would have to be carried over a mile. It must be remembered that people in that period had very fresh memories of the awful times of 1641 and the years following, so that in selecting a site for a house, facility for defence was probably the first thought,

and here was an ideal site from this point of view. That the house was eventually burned was apparent from the fragments of charred wood in the debris. This is borne out by the account in Mason's survey, though Mr. Mayne's statement that tradition said that here once had existed a

nunnery has no foundation in fact.

But now we come to documentary evidence. In the hearth money rolls for 1669, it appears that in the Manor of Old Stone one "Mister" Hillman (whether Simon or his son, we know not), paid tax on four hearths, which corresponds to the house our excavations disclosed, as fires in the bed rooms were, in those days of the hearth tax, unlikely. Then in a pedigree of the family of Cuppage, we find John, younger son of a rather distinguished man, Stephen Cuppage, Esq., M.P. for Coleraine, as " of Clough Castle, Co. Antrim," in the year 1700. In 1746, Sampson Moore, of Cullytrummin, obtained a perpetuity lease of a large property in Co. Antrim, including Clough and several adjoining townlands, from the fifth Earl of Antrim, having evidently purchased the interest of the Cuppage family, who at about the same time procured a property near Cushendall known as Mount Edward, on the slope of Luragedin Mountain. The Moore family, now represented by the present Lord Chief Justice, continued to hold large landed property in County Antrim until the recent sale to the tenants; this particular portion of the estate, Clough, went through a female line to a family of Murray, who were the last owners prior to the sale under the Land Acts.

Two features of interest were examined during the excavations. Mason's Survey mentions a hollow in the ground some little distance inside the gate, which he surmised might have once been a draw well. Excavation in this hollow, however, proved that this surmise was incorrect, as the undisturbed till was but a few inches below the sod. Then Mr. Gregg told us that his father, who only died in November, 1926, assured him that an underground passage lay on the west side of the rock, and that he had been in it, and actually removed stones from it. Trenches were dug on this part of the site, but the passage was not found; it is interesting, however, to note that as much as 8 feet below the surface of the field remains of stone and lime-built walls were found. It was not considered advisable to con-

tinue the excavation further.

# EDUCATIONAL ENDOWMENTS (IRELAND) ACT, 1885.

The Account of Belfast Natural History and Philosophical Society for the year ended 31st November, 1927. 户 中

٦	00,000	0.0	1.4	
	00200	99 15 10 44 4 6		28.
)	£39 11 62 15 52 15 75 15 10 0	© 4	rÖ	19.
	£3 6 7 1	0.4	£365 3	dito
	::::::0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 :	Λυ Mar
	14	6 0 7 111 2 2 2 2 0 15 11 1 1 1 1 1 56 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		of J
		6 2 2 0 0 1 1 56 Iov.		PK BK
		Audit Fees, 1925/1926 7 11 6  Audit Fees, 1925/1926 7 2 2 0  Bank Interest 0 15 1  Bank Charges 1 0  Archæology 56 12 5  Balance in favour of Account on 30th Nov., 1927	Total,	I certify that the foregoing Account is correct.  R. CLARKE, Auditor.  1928.
	DISCHARGE.  3y Maintenance of Premises, &c.  3. Rent, Rates and Taxes  3. Salaries  4. Printing and Stationery Accounts  5. Postages  6. Destages  7. Destages  9. Destages  1. Dectures  1. Dectures	30t	T	nt in
	&c			cou
	By Maintenance of Premises, &c. ", Rent, Rates and Taxes ", Salaries ", Printing and Stationery Account, ", Advertising Accounts ", Postages Other Payments, viz	Journal, 2 years		Ас
	nise ves ery s	Subscription than National Journal, 2 years Lantern Slides Audit Fees, 1925/1926 Bank Interest Bank Charges rechaeology in favour of Account		ing
	By Maintenance of Premise, Rent, Rates and Taxes., Salaries, Printing and Stationery, Advertising Accounts, Postages Other Payments, viz.:— Lectures	Subscription transport of the Journal, 2 ye Lantern Slides Audit Fees, 1925, Bank Interest Bank Charges rrchæology in favour of Acc		eg.o
	of I nd Star eco viz.	Lantern Slides Journal, 2 Lantern Slides Audit Fees, 19 Bank Interest Bank Charges rrchæology in favour of		for
	ce c	Journa Journa Journa Journa Journa Juntern Sil Audit Fees Bank Inter Bank Char, Archæology		the
	tenance Rates a les ling and rtising A ges yments,	Joseph Jo		hat
	ntelling ting age	La La Au Ba Arc		y tl
	y Maintena , Rent, Ra , Salaries , Printing , Postages , Postages , ther Payme	a II C		rtif
	3y ] ,, S ,, Y ,, L	Bar		I ce
	- H - O			
		1	4	
-	114 113 0	60 6 11	ю	
	£1 2 122 14 29 13 1 6 150 0	09	965	
		t on I	£365 3	
	ا ا ا ا ا	119		cer
	  mes  29 6	1 1 1 2 3	1,	unt
		5	Total,	ng ng
	Yol	305	1	e 4 unti
	CHARGE. ccount antenary V viz.:	÷ ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;		tru nor. cco 'y',
	All marries	-10		s a ver
	- e e	. 4		0 70 5
	CH Accou			e E E
	CH ct	Co.		bove i CT. Go OWES
	CH last Accor	book Skets pg. Co. 28-47		e above i IOTT. G RROWES
	CH per last Accor Sales of Cente s Receipts, viz	n Book Tickets x Spg. Co. , 1928-47		the above in the above in day of Feb
	as per last Accorions by Sales of Cente eous Receipts, viz mes	frum Book of Tickets Flax Spg. Co. oan, 1928-47 Regr.)		that the above is a true Act. ELLIOTT. Governor. B. BURROWES, Accounting the day of February, 1928
	ce as per last Accorriptions ands ed by Sales of Cente laneous Receipts, viz ectures rchæology	tendrum Book ale of Tickets f. Flax Spg. Co. r Loan, 1928-47		fy that the above is J. ELLIOTT. G. W. B. BURROWES
	CH dance as per last Acco bscriptions alised by Sales of Cente nts Ceellaneous Receipts, viz Lectures Archæology	Sale of Tickets Lies— k St. Flax Spg. Co. War Loan, 1928-47 elfast Regr.)		ertify that the above is a true Account. E. J. ELLIOTT. Governor. W. B. BURROWES, Accounting Officer. 15th day of February, 1928.
	.:: , A	Sale of Tickets   1-8		We certify that the above is a true Account E. J. ELLIOTT. Governor. W. B. BURROWES, Accounting Off 15th day of February, 1928.

IN ACCOUNT WITH THE BELFAST NATURAL HISTORY AND PHILOSOPHICAL SOCIETY.	ORY AND PHILOSOPHICAL SOCIETY.
ARCHÆOLOGICAL SECTION.	ON.
lance £38 12 9 Dec. 2— beriptions £38 12 9 Dec. 2— 28 16 8 Mar. 25— 31 0 May 26— 34 0 May 26— 35 0 May 26— 36 0 May 26— 37 0 May 26— 38	1925/1927.  Dec. 2—By Assistants, H. C. Lawlor 56 0 0  Lec. 2—By Assistants, H. C. Lawlor 512 6  Iar. 25—, R. Welch—Drumena 512 6  31—, Jas. H. Gregg—Clough 5 2 8  Apy 26—, Rent 6 16  Iay 26—, B. Walsh—Drumena 6 16 6  Iay 6—, Jas. H. Gregg—Clough 6 16 6  Indy 6—, 6  Indy 6—,
1927—Nov. 3. To Balance 22 19 8	279 11 11
NENDRUM BOOK	
To Balance £12 10 6  1. Sales, &c £26 15 10  To Balance £26 15 10  To Balance	
\$26 15 10	£26 15 10

### EXCHANGES.

Abo—Publications of the Abo University Library.

ALBANY—Bulletin of the New York State Museum.

ANN ARBOR—Publications of the University of Michigan.

AUCKLAND—Publications of the Auckland Institute and Museum.

Basel—Verhandlungen der Naturforschenden Gesellschaft in Basel 1925-27.

Bergen (Norway)—Publications of the Bergen Museum.

Berkeley—Publications of the University of California.

BIRMINGHAM—Publications of the Birmingham Natural History and Philosophical Society.

Boston—Publications of the Boston Society of Natural History.

BOULDER—Bulletin of the University of Colorado.

Bremen—Publications of the Bremen Museum.

Brighton—Abstracts of Papers of Brighton and Hove Natural History and Philosophical Society, 1926, 1927.

Brisbane—Memoirs of the Queensland Museum.

Brussels—Bulletins of the Royal Society (Botanical) of Belgium.

Publications of the Royal Zoological Society of Belgium.

Buenos Aires—Publications of the National Museum of Natural History.

CALCUTTA—Publications of the Geological Survey of India. Cambridge—Proceedings of the Cambridge Philosophical Society.

Cambridge, Mass—Publications of the Museum of Comparative Zoology.

Cardiff—Transactions of the Cardiff Naturalists' Society.

Chicago—Publications of the Field Museum of Natural

History.

,, Publications of the Chicago Academy of Sciences.
CINCINNATI—Publications of the Lloyd Library.

Combra—Memoirs of the Zoological Museum of the University of Coimbra.

Colorado Springs—Publications of Colorado College.

Columbus—Ohio Journal of Science.

Bulletins of the Ohio State University.

Dublin—Proceedings of the Royal Dublin Society.

Danzig—Publications of the Natural History Society of Danzig.

EDINBURGH—Proceedings of the Royal Physical Society.

,, Proceedings of the Royal Society of Edinburgh.

Transactions and Proceedings of the Botanical Society of Edinburgh.

Glasgow, Transactions of the Geological Society of Glasgow, 1925-26.

,, Proceedings of the Royal Philosophical Society of Glasgow.

Goteburg—Publications of the Royal Society of Science and Letters.

Halifax, N.S.—Proceedings and Transactions of the Nova Scotian Institute of Science.

Indiana Proceedings of the Indiana Academy of Science.

La Plata—Publications of the National Museum of Natural History.

LAUSANNE—Memoirs and Bulletins de la Societe Vaudoise des Sciences Naturelles.

Lawrence—Bulletins of the University of Kansas.

Lima—Boletin del Cuerpo de Ingenieros de Minas del Peru.

LIVERPOOL—Proceedings of the Liverpool Botanical Society.

I.ondon—Quarterly Journal of the Royal Microscopical Society.

,, Memoirs of the Royal Astronomical Society.

,, Publications of the British Association.

Publications of the British Museum (N.H.).

Proceedings of the Royal Institute of Great Britain.

Quarterly Journal of the Geological Society.

Madison—Bulletins of the Wisconsin Geological and Natural History Survey.

Madras—Report of the Government Museum of Madras, 1926-27.

Manchester—Journal of the Manchester Geographical Society.

Melbourne—Proceedings of the Royal Society of Victoria.

Mexico—Publications of the Geological Institute of Mexico.

New Haven.—Transactions of the Connecticut Academy of

Arts and Sciences.

NEW YORK—Annals of the New York Academy of Sciences.

ORONO—Bulletins of the Maine Agricultural Experiment

Station.

Oslo—Publications of the Royal University Library.

,, Publications of the Academy of Science and Letters. Ottawa—Publications of the Geological Survey of Canada,

Department of Mines.

Philadelphia—Proceedings of the American Philosophical Society.

Publications of the Academy of Natural Sciences.

PISA—Publications of the Society of Natural Sciences.

RENNES.—Bulletin de la Societe Geologique.

RIO DE JANEIRO—Publications of the National Museum of Brazil.

ROCHESTER, N.Y.—Proceedings of the Rochester Academy Science.

San Francisco—Proceedings of the Californian Academy of Sciences.

STAVANGER.—Publications of the Stavanger Museum.

St. Louis—Public Library Monthly Bulletin.

STRATFORD—The Essex Naturalist.

Sydney—Annual Report of the Technological Museum. 1926.

Tacubaya—Annual Report of the National Astronomical Observatory of Tacubaya.

Toronto—Transactions of the Royal Canadian Institute.

Torquay—Transactions and Proceedings of the Torquay
Natural History Society.

Upsala—Bulletin of the Geological Institution of the University of Upsala.

- Washington—Yearbook of the United States Department of Agriculture, 1925.
  - ,, Annual Report of the Smithsonian Institu-
  - Annual Report and Bulletins of the United States National Museum.
  - Publications of the Bureau of American Ethnology.
  - ,, Bulletins of the Smithsonian Institution.
  - ,, Proceedings of the United States National Museum.
  - ,, Smithsonian Institution, Miscellaneous Collections.
  - .. Publications of the United States Geological Survey.
- Wein—Publications of the Society of Zoology and Botany in Wein.
- York—Annual Report of the York Philosophical Society, 1926.
- ZURICH—Publications of the Natural History Society of Zurich.

## SHAREHOLDERS AND MEMBERS.

Corrected to November, 1927.

[\*Denotes Holders of three or more Shares.]

[a ,, Members of Archæological Section.]

the state of the s	_
aAcheson, F. W., 37 Osborne Park,	Belfast
Adams, John, Auburn, Cranmore Park,	do.
*Alexander, Francis, B.E.	do.
Alderdice, Richard Sinclaire, F.C.I.B., 7 Wellington	
Place,	do.
aAllingham, Robert, J.P., North Street,	do.
Allworthy, S. W., M.D., Manor House, Antrim Road,	do.
aAnderson, Frank, M.B.E., Willoughby Terrace, Port	adown
aAnderson, Mrs., Ballyhossett, Down	patrick
aAndrews, Michael C., F.R.G.S., F.R.S.G.S., Orsett,	
Derryvolgie Avenue,	Belfast
aAndrews, Miss Elizabeth, 10 Park Crescent,	
Tonbridge	, Kent
aArcher, Rev. Canon, B.D., Seagoe Rectory, Port	adown
aAtkinson, Arthur S., Dromana, Knockdene Park, 1	Belfast
Baker, Geo. E., c.A., Lismacue, Belmont Road,	do.
Baker, Mrs. Alyn N., Lismacue, Belmont Road	do.
aBaird, Major William, J.P., Royal Avenue,	do.
Beattie, W. R., A.C.A., 23 Cyprus Avenue	do.
aBennett, S. A., B.A., B.Sc., 184 Waterloo Road,	
Burslem, Stoke-or	n-Trent
aBerry, Colonel, M.R.J.A., J.P., Ardaluin, Nev	vcastle
aBirch, J. P., Ashfield House, Ravenhill Road,	Belfast
Blair, John G., 3 Victoria Gardens,	do.
aBlake, R. F., F.I.C., 4 Knock Road,	qo.
Boyd, Thornton, Blackstaff Spinning Company	do.
aBoyd, Miss Kathleen St. Clair, Chatsworth,	
University Road,	do.
Boyd, John, San Remo, Holland Park, Neill's Hill,	do.
Bradbury, Prof. F., Municipal College of Technology	do.

"aBreene, Rev. R. S., LL.D., 4 Beechgrove, Bristol Avenue,	Belfast
aBrett, The Very Rev. Dean, M.A., Montrose,	
Somerton Road,	do.
Brierley, J. C. A., M.Sc., F.I.C., 224 Cliftonville Rose	ad, do.
Bristow, John, 10 College Square North,	do.
*Brown, George B., Lisnamaul, Ormeau Road,	do.
Brown, J., M.A., B.SC., 32 Maryville Park,	do.
aBurrowes, W. B., F.R.S.A.I., Ballynafeigh House	,
Ravenhill Road,	do.
aByrne, J. Edwards, J.P., F.R.S.A.I., 37 Royal	
Avenue,	do.
aCampbell, A. A., F.R.S.A.I., Drumnaferrie, Rosett	
Park,	do.
*Campbell, Miss Anna (Representatives of),	do.
	raigavad
Carrothers, E. N., 145 Stranmillis Road,	Belfast
aCarter, C. S., 7 Knockbreda Road.	do.
aCharlemont, The Rt. Hon. The Viscount,	m
	Tyrone
Clark, Sir George S., Bart, D.L., Dunlambert,	Belfast
aClarke, John, Antrim Arms Hotel, Cleeland, Robt. V., 13 Eglantine Gardens,	Glenarm Belfast
aCleland, A. M'I., Macedon, Green Road, Knock,	do.
Combe, Barbour & Co., Ltd.,	do.
Corbett, Miss R. M., 16 Derryvolgie Gardens,	do.
aChart, D. A., LITT.D., M.R.I.A., 12 Malone Park,	do.
aClarke, G. W., M.B.E., 39, Adelaide Park,	do.
aCrawford, Col. The Rt. Hon. R. G. Sharman, D.I.	٠.,
Crawfe	ordsburn
aCrawford, W. M., B.A., I.C.S., F.E.S., F.Z.S.,	
Orissa, Marlborough Park,	Belfast
Cromie, A. G., Seeburgh, Castle Avenue,	de.
Crymble, H., 40 Wellington Place,	do.
aCunningham, Right Hon. S., Fern Hill, Ballygo-	
martin Road,	do-

Cutler, H. A., M.INST.C.E., Craigdarragh Cottage, Helen's Bay aDawson, Col. W. R., M.D., M.R.I.A., 26 Windsor Park, Belfast Davies, A. C., Lenaderg House, Banbridge, Co. Down Davin, Miss A. G., Glenmore Lodge, Lambeg Davison, A. H., F.A.I., F.R.S.A.I., 32 Wellington Place, Belfast Deans, T. M., LL.D., Academy House, Rosetta, do. \*Deramore, Lord, D.L., Heslington Park, York Despard, V. D., 10 Academy Street, Belfast aDickie, John W., 51 Ravenhill Park, do. Dixon, Professor, M.A., SC.D., F.R.S., St. Ives. Bladon Drive. do. Dobbs, A. E., M.A., Kildollagh, Coleraine

\*Donegall, Marquis of (Representatives of), \*Downshire, Marquis of. Drummond, T. H., 7 Chichester Street, do. Dunleath, Lord, Ballywalter Park, Ballywalter, Co. Down

Comber

Belfast

Donaldson, B. A. K., Westaston,

Earls, Professor J., B.A., Municipal College of Technology, Belfast Ewart, Fred W., M.A., B.L., Derryvolgie, Lisburn Ewart, Sir Robert H., Bart., Glenmachan House, Belfast Elliott, E. J., F.R.S.A.I., Holywood

Elliott, Miss A., B.A., Ardroe, Bloomfield, Belfast aFallon, Mrs. E. J., 25 St. James' Park, do.

Antrim Road do. Finlay, Archibald H., A.C.G.I., A.I.E.E., Willesden, Holywood

a Ferguson, G. W., c.E., J.P., Carnamenagh.

Finlay, Robert H. F., Victoria Square, Belfast do. Forsythe, J., Lisadell, Cliftonville Road, Cullybackey aFrazer, Kenneth J., Hillmount,

	00
aFrench, E. J., M.A., St. Anne's, Donnybrook,	Dublin
Fry, W. Arthur, High Street,	Holywood
Fulton, G. F., Arlington, Windsor Avenue,	Belfast
, , , , , , , , , , , , , , , , , , , ,	37012437
aGarrod, Geoffrey, M.A., B.L., Maryville, Malone	
Road,	do.
Geale, R. G., 40 Wellington Park,	do.
*Getty, Edmund (Representative of),	do.
Gibbon, LtCol. W. D., D.S.O., M.A., Campbell	
College,	do.
Gibson, Andrew, F.R.S.A.I., Fairfield, Lansdowne	
Road,	do.
Gibson, W. H., O.B.E., D.SC., F.I.C., F.INST.P., L	inen
Research Institute, Lambeg	do.
Gibson, W. K., 44 Upper Arthur Street,	do.
Goldsbrough, J. B., Central Public Library,	do:
aGore, Wm., F.R.S.A.I., Municipal College of	
Technology,	do.
Gordon, J. S., D.SC., Ministry of Agriculture,	do.
Gordon, Malcolm, Dunarnon, University Road	do.
Gourlay, R. J., Central Public Library,	do.
Grainger, Robert, The Beeches,	Holywood
Green, H. Percy, Limehurst, Holland Park,	Belfast
aGreeves, Arthur, Altona, Strandtown,	do.
aGreeves, F. M., Garranard, Strandtown,	do.
aGreeves, John Theo., Nendrum, Knockdene Par	k, do.
aGreeves, W. Leopold, 11 Ormeau Road,	do.
	Portade wn
Grogan, J., Junior, 2 Orient Gardens,	Belfast
aGillmour, J. W., Knocknarea, Kensington Road	, Knok
, , , , , , , , , , , , , , , , , , , ,	
Harris, Miss S. M., 25 Hartington Street,	Belfast
aHall, Councillor D. Lyle, 79 Cliftonville Road,	do.
	Waterford
*Hamilton Hill, J.P. (Representative of),	Belfast
Hanson, W. M., St. John's Villa, Holland Park,	do.

Harland, Capt. W., 4 Psalter Lane, Hawthorne, John, B.A., PH.D., F.I.C., 16 Donegall	Sheffield
Square S.,	Belfast
Henderson, J. W., M.A., Methodist College,	do.
aHenry, Professor R. M., M.A., M.R.I.A., Crosshill,	uo.
Windsor Avenue , North,	do.
	Strabane
*Herdman, Robert Ernest, D.L., J.P., Merronhurst,	
	o. Down
aHeron, F. Adens, D.L., J.P., F.R.S.A.I.,	0. 20.112
	folywood
aHewton, John, M.P.S.I., Ava Pharmacy, 315 Ormo	
Road,	Belfast
Hill, Miss E. W., 61 Marlborough Park South,	do.
Hill, W. K., 61 Marlborough Park South	do.
aHill, S. W., M.D., 46 Pound Street.	Larne
Hind, John, 22 Cliftonville Road,	Belfast
aHogg, A. R., 10 Thorndale Avenue,	do.
Honneyman, Wm., B.Sc., (LOND.), F.I.C., York	
Street Flax Spinning Co.,	do.
Hoskins, A. Percy, F.I.C., F.C.S., 14 Rosetta Park,	do.
*aBlakiston-Houston, Major C., D.L., J.P., Myode,	
Bloomfield,	do.
*Hughes, Edwin, Craigavad (Representatives of) C	o Down
Hummel, Professor F. H., M.SC., A.M.I.C.E., Queen	's
University,	Belfast
Hunter, William, J.P., Fortwilliam Villas,	do.
	_
Irwin, Wilson, Helen's Bay,	o. Down
Jenkins, J. C., 86 University Road,	Belfist
aJohnston, E. C., F.R.S.A.I., Lyncote, Helen's Bay	,
C	o. Down
Jones, H. H., 3 Wilmont Terrace,	Belfast
aJury, P. M., Brooklands, D	unmurry
aJennings, V. G., Wellcroft, Sandown Road,	Knock

aKerr, A. W. M., M.A., LL.D., Rocklands, Water	
Gardens,	Belfas
*Kinghan, John R. (Representatives of),	1
Windsor Avenue, Kinneind Miss 1 Enlanting Place	do.
Kinnaird, Miss, 1 Eglantine Place,	do.
aKnox, Major S. W., Ll.B., Glenburn, Dunmur	
Kyle, Robert Alexander, 15 Wellington Park,	do.
aLamb, G. C., Leura, Finaghy,	do.
Larmor, J. F., Beech Hill, near Lisburn,	
aLawlor, H. C., M.A., M.R.I.A., 14 Windsor Avenu	ue, Belfast
aLawlor, Mrs. H. C., 14 Windsor Avenue,	do.
aLepper, R. S., M.A., F.R.HIST-S., LL.M., F.R.S.A	.I.,
Elsinore, Crawfordsburn,	Cc. Down
Lewars, D. B., 17 Dundela Gardens, Bloomfield	, Belfas
Liggett, Miss M. M., 109 The Mount,	do.
Lindsay, Professor J. A., M.A., M.D., F.R.C.P.,	
Queen's Elms,	$\mathrm{do}\cdot$
Livingstone, R. W., M.A., D.LITT., M.R.I.A., Elm	rwood
House,	do.
aLoewenthal, John McC., Lennoxvale, Malone R	Coaα, do.
aLondonderry, The Marquess of, K.G., P.C., M.V.	Σ,
LL.D., Mount Stewart, Ne	wtownards
aLondonderry, The Marchioness of, D.B.E., J.P.,	
Mount Stewart,	do.
Loughridge, James, 173 Cliftonville Road,	Belfast
Logan, Jas., M.A., F.R.G.S., Greystone, Ravenhill	Pk., do.
aLowry-Corry, Hon. Cecil, J.P., Castle Coole,	
,	Fermanagh
aLowry-Corry, Lady Dorothy, Castle Coole,	do.
	Strandtown
Lowson, S. S., 4 Wilmont Terrace, Lisburn Road	l, Belfast
*Macrory, A. J. (Representative of),	do.
aMagill, Mrs. A. P., 9 Wilmont Terrace, Lisburn	
Road,	do.
aMagill, Hugh, 217 Cavehill Road,	do.

Magill, John E., Eversley, Whitehead
aMackie, James, D.L., J.P., Albert Foundry, Belfast
Malcolm, Bowman, M.I.C.E., M.I.MECH.E., Inver, Ashley Park, Antrim Road, do.
Malcomson, Herbert, Riverside, Holywood
Malcomson, Herbert T., M.B.C.U., 32 Arthur Street, Belfast
aMassereene and Ferrard, Rt. Hon. The Viscount,
H.M.L., D.S.O., Antrim Castle,  Antrim
Maxton, James, M.I.N.A., M.I.MAR.E., 6 Kirkliston
Drive. Belfast
Maxwell, W. C., A.R.I.B.A., 29 Donegall Street, do.
aMayes, William, Kenmuir, 12 Deramore Park South, do.
Mayne, H. Horner, 24 Elmwood Avenue, do.
Mercer, Prof. S.P., Hanging Leaves, Carrickfergus
aMercier, Mrs. W. C., Garvock, Green Road, Knock
aMerrick, A. S., 32 Wellington Park, Belfast
Metcalfe, A. W., Hawthornden House,
Hawthornden Road, do.
Miller, Thos. Osborne, 306 Antrim Road, do.
Milligan, A., 4 Cooke Street, do.
Mitchell, Robert A., Ll.B., T.C.D., Marmont,
Strandtown, do.
aMontgomery, Miss E. S., 26 College Green, do.
aMontgomery, H. C., 40 Rosemary Street, do.
aMontgomery, H. H., 19 Malone Park, do.
aMorton, Professor W. B., M.A., M.R.I.A., Glencarse,
Nottinghill, do.
Morton, Frederick, 38 Brookvale Avenue, do.
Muir, A. H., F.C.A., 7 Donegall Square West, do.
Muskett, A. E., 232 Stranmillis Road, do.
Mullan, William, Lindisfarne, Marlborough Park, do.
*Murphy. Isaac James (Representatives of), Armagh
*Murphy, Joseph John (Representatives of), Belfast
*Musgrave, Henry, D.L. (Reps.), Drumglass, Malone, do-
aMacalister, Professor, R.A.S., D.LITT., M.A., 18 Mount
Eden Road. Donnybrook, Dublin

*McCammon, Thos. P. (Representatives of),	
Woodvale, Holywood, C	o. Down
McCance, Captain Stouppe, 4 Markham Square,	
	S.W.3.
McCaughey, John, 79 Somerton Road,	Belfast
aMacConaill, Michael, M.B., B.Sc., 18 India Street,	do.
aMcCoy, B. J., f.r.s.a.i., 84 Smithfield,	do.
McCoy, W. R. S., 27 Damascus Street,	do.
*McCracken, Francis (Representatives of),	
aMcCready, H. L., M.A., 104 Myrtlefield Park,	do.
MacDonald, David, Castle Road,	Comber
McDowell, Chas, Stephen, B.Sc., 33 Wellington Par	ck
	Belfast
McGill, J. F., Ardoyne Cottage, Ardoyne,	do.
aMcGowan, Thomas, 73 Ann Street,	do.
aMcIlveen, J. H. M., Irene, Parkmount Road,	do.
MacIlwaine, Dr. John E., 26 College Gardens,	do.
McKean, Edw. John, B.A. (OXON), B.L., Gorteen	
Somerton Road,	do.
aMcKeown, Rev. Leo, c.c., Dow	npatrick
aMcKisack, C. J., 9 Mount Pleasant,	Belfast
MacLaine, Alexander, J.P. (Representatives of),	
Queen's Elms,	do.
MacLaine, L., Rathcline, Annadale Avenue,	do.
MacMillen, Rev. J., M.A., D.D., 151 Ravenhill Road	, do.
McMullan, C., Bangor Road, H	olywood
McMullan, P. J., J.P., Churchfield,	do.
aMcNeill, George, 12 Deramore Park,	Belfast
Nicholl, William, 10 St. James' Street, American	do.
Noble, R. S. H., M.A., Lisnatore, Suffolk, Du	ınmurry
Nodder, Mrs., The Corner House,	Lambeg
Orr, James, M.B.O.U., 17 Garfield Street,	Belfast

a\*Osborne, T. Edens, F.R.S.A.I., 4 College Square N. do.

Patterson, John F., 2 Mountcharles, Belfast
Patterson, Robert, M.R.I.A., F.Z.S., M.B.O.U.,
The Crest, Berrylands, Sirbiton, Surrey
aPercival, R. D., J.P., Karyhill, Downpatrick
Pinkerton, E. S., B.A., B.E., A.M.I.C.E., Oak Lodge.
Cedar Avenue, Belfast
Pollock, Rt. Hon. H. M., D.L., M.P., 11 College
Gardens, do.
Pomeroy, A. G., M.A., Arnside, Dundonald
Porter, S. C., 112 Eglantine Avenue, Belfast
Porter, Mrs., do. do.
aRaines, Colonel, p.s.o., Ardview, Killinchy, Co. Down
Rangecroft, J., 2 Derryvolgie Avenue, Belfast
Rhynehart, John G., F.R.C.Sc.I., 13 Ashley Ave., do.
aRhys-Pryce, Arthur Reginald, B.A., L.TH., F.R.S.A.I.,
2 Royal Terrace, Lisburn Road, do.
Rice, Capt. J. P., B.Sc., Stormont, Strandtown, do.
aRichmond, Ian A., M.A., Queen's University, do.
Riddell, W., M.A., 51 Myrtlefield Park, do.
aRippingham, T. F. O., A.R.I.B.A., Tramore, Greenisland
aRitchie, John, Cullintra, Comber
Robertson, G. S., D.Sc., Queen's University, Belfast
Robinson, E. G., 1 Ashville, Inver Avenue, Antrim
Road, do.
aRobinson, A., M.V.O., C.B.E., Cooleen, Donegall
Park, do.
Rusk, John, B.A., M.B., 188 Antrim Road, do.
aRutherford, Rev. J. C., B.A., My Lady's Road, do.
, , , , , , , , , , , , , , , , , , , ,
aSalter, Victor, 6 Pickie Terrace, Bangor
aSalter, Mrs. V., 6 Pickie Terrace, de.
Savage, Arthur, Westhorp, Cherryvalley.  Belfast
Scott, H. C., 9 Rashee Road, Ballyclare, Co. Antrim
Scott, James, B.E., Craigtara, Annadale Avenue, Belfast
Semple, John, Marlborough Park Central, do.
beinpie, John, martiolough raik central, do.

aShanks, E., Fernagh, Saintfield Road,	Belfast
aSheridan, Wm., 9 Roe Street, Cliftonville,	do.
aSimms, Saml., B.Sc., M.D., 22 Oldpark Crescent,	do.
Sinclair, Professor Thomas, M.D., F.R.C.S., Eng.,	
University Square,	do.
aSinclair, Thomas, J.P.,	Lisburn
aSkillen, Joseph, 25 Stranmillis Gardens,	Belfast
Small, Professor James, D.SC., M.R.I.A., PH.C., F.R.	S.E.,
34 Green Road, Knock,	do.
Smith, J. D., J.P., M.I.C.E., Oakleigh, Ravenhill Ro	oad, do.
aSmith, R. Ingleby, o.B.E., L.R.I.B.A., F.S.I., 57	
Eglanfine Avenue,	do.
Stanley, Major Rupert, IL.D., B.A., M.I.E.E., F.I.R.	
Education Office,	do.
Steen, William, B.L., Roseberry, Marlborough Parl	k, do.
Stelfox, A. W., M.R.I.A., A.R.I.B.A., Mayfield, 14	
Clareville Road, Rathgar,	Dublin
aStephens, Captain, J. K., J.P., 13 Donegall Square	e
North	Belfast
aStevenson, John, M.A., Coolavin, Malone Road,	do.
Stewart, Prof. A. W., M.A., D.SC., Queen's	
University,	do.
Stirling, James H., Mount Randal,	do.
Strahan, Thos. Sherlock, B.SC., The Manse,	Newry
aSymmers, Professor W. St. C., M.B., 23 Windson	
Avenue,	Belfast
aSheils, Rev. J. F., P.P., Carrickmannon, B	allygowan
	70. 10.
*Tennant, Robert (Representative of), Rushpark,	Belfast
*Tennent, Robert James (Representative of),	
Rushpar	
*Thomas, Harold, 19 Holland Park, Knock,	do.
aThompson, Edward, Prospect Mills,	Belfast
a'Thompson, John, J.P., Mountcollyer, Malone Ro	
aThompson, Joseph Altorf, Holywood Road,	do.
aTorney, H. C. S., F.R.S.A.I., The Moat,	Holywood

Totten, J. H., B.A., B.Sc., F.I.C. 16 Donegall	
Square S.,	Belfas
Trimble, Dr. A., J.P., Tyr Owen, Downview Ave.,	do.
aTurner. S., junior, 142 Cliftonpark Avenue,	do.
*Turnley, Francis, D.L., Drumnasole, Ca	arnlougl
aWolposlov Duof III v z z z z z o z	
aWalmsley, Prof. T., M.D., F.R.S.E., Queen's	D . 16
University,	Belfas
aWallace, Colonel the Rt. Hon. R. H., c.b., D.L., Myra Castle, Dow	
	npatricl
*Webb, Richard (Representative of), Knock,	Belfas
	olywood
Weldon, Francis, Clifden House,	do.
Whitaker, W. Martin, K.C., M.A., 4 Castleton Terrace.	Dalfam
,	Belfast
White, G. W., Chatsworth, Balmoral Avenue,	do.
Whitehouse, Rev. Sydney P., 107 Fitzroy Avenue,	do.
Whitham, Miles R., Chamber of Commerce,	do.
Whitla, Sir William, M.D., J.P., Lennoxvale,	do.
aWilson, Prof. Gregg, o.B.E., M.A., PH.D., D.SC.,	1
M.R.I.A., Queen's University,	do.
aWilson, George, 17 Bedford Street,	do.
*Wilson, W. Percival (Representative of),	do.
Wilson, Rev. J. S., B.A., B.D., The Manse,	,
Duncairn Avenue,	do.
Wolff, G. W. (Representatives of),	do.
Woodhouse, William, 24 Evelyn Gardens, Cavehill	
Road,	do.
Workman, W. H., M.B.O.U., F.Z.S., Lismore, Winds	
Avenue,	do.
, , , , , , , , , , , , , , , , , , , ,	n's Bay
Workman, W., 8 Corporation Street,	Belfast
Wren, Prof. H., M.A., D.SC., PH.D., Municipal Colle	-
of Technology,	do.
Wright, W. S., 71 Marlborough Park,	do.
*Young, Capt. J. R., Rathvarna, Chichester Park,	do.

do.

### HONORARY MEMBERS.

d'Albe, Fournier, D.Sc. Lond. & Birm.), A.R.C.Sc. M.R.I.A., The Hermitage, Portsmouth Road, Kingston Bell, Robt., 64 Newington Avenue, Belfast aCarmody, The Very Rev. W. P., M.A., M.R.I.A., Dean of Down, Downpatrick Crone, Dr. J. S., J.P., M.R.I.A., 34 Cleveland Road, Ealing, London, W. a\*Deane, Arthur, F.R.S.E., M.R.I.A., Mount Nephin, Newtownbreda aMorton, Professor W. B., M.A., M.R.I.A., Glencarse, Nottinghill, Belfast aStendall, J. A. S., M.R.I.A., M.B.O.U., Museum,

Swanston, William, F.G.S., Farm Hill, Dunmurry aWelch, R. J., M.SC., M.R.I.A., 49 Lonsdale Street, Belfast

College Square,

# ANNUAL SUBSCRIBERS OF TWO GUINEAS.

Belfast Banking Company, Ltd., Belfast
Northern Banking Company, Ltd., do.
Ulster Bank, Ltd., do.

[The Hon. Secretary will be obliged if shareholders and members will notify him in the event of change of address, or of any inaccuracies appearing in the names and addresses in the list. Address:—The Museum, College Square North, Belfast.]



